



Product Specifications Reference Lenovo® ThinkPad® Notebooks 2013 to present - withdrawn

April 2015 - Version 471 (Western Europe)



http://www.lenovo.com/psref/psrefs_withdrawn.html

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Summary of Changes

This section describes the withdrawn products which are added in this edition and in previous editions.

May 27, 2014 - Version 454

► Withdrawn product(s)

ThinkPad X131e is withdrawn and added in the book

ThinkPad T430u is withdrawn and added in the book

June 18, 2014 - Version 455

► Changes in this update

ThinkPad X131e is reactive and return into tabook

August 19, 2014 - Version 458

► Withdrawn product(s)

ThinkPad L430 is withdrawn and added in the book

ThinkPad L530 is withdrawn and added in the book

ThinkPad T430 is withdrawn and added in the book

ThinkPad T430s is withdrawn and added in the book

ThinkPad T431s is withdrawn and added in the book

ThinkPad T530 is withdrawn and added in the book

ThinkPad W530 is withdrawn and added in the book

ThinkPad X230 is withdrawn and added in the book

ThinkPad X230 Tablet is withdrawn and added in the book

ThinkPad X1 Carbon is withdrawn and added in the book

January 7, 2015 - Version 466

► Withdrawn product(s)

ThinkPad X131e is withdrawn and added in the book

April 15, 2015 - Version 471

► Withdrawn product(s)

ThinkPad W540 is withdrawn and added in the book



Lenovo® ThinkPad L430



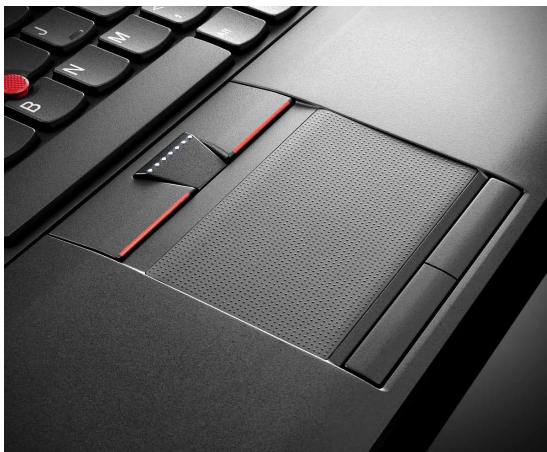
Lenovo ThinkPad L430



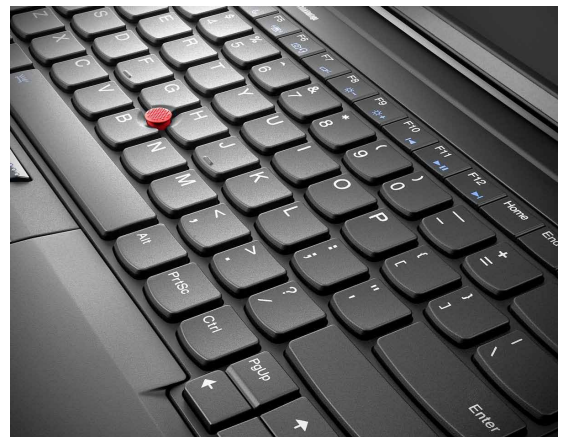
Lenovo ThinkPad L430



Lenovo ThinkPad L430



Lenovo ThinkPad L430



Lenovo ThinkPad L430

ThinkPad L430 2468 (TopSeller)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Card slot | Finger print reader | Blue-tooth | Bat-tery cells | Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|------------|------------|---------------------|------------|----------------|-----------------|----------|
| 2468-34G | i3-2370M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | None | Finger | BT | 6 | Pro 64 06/12 | 06/12 |
| 2468-35G | i5-3210M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | None | Finger | BT | 6 | Pro 64 06/12 | 06/12 |
| 2468-36G | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | TP 11b/g/n | Ericsson | selectable | None | Finger | BT | 6 | Pro 64 06/12 | 06/12 |
| 2468-37G | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | None | Finger | BT | 6 | Pro 64 07/12 | 07/12 |
| 2468-3HG | i3-2328M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Pro 64 09/12 | 09/12 |
| 2468-3MG | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Express 54 | Finger | BT | 6 | Pro 64 09/12 | 09/12 |
| 2468-3LG | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | TP 11b/g/n | Ericsson | selectable | Express 54 | Finger | BT | 6 | Pro 64 09/12 | 09/12 |
| 2468-3KG | i5-3210M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Pro 64 09/12 | 09/12 |
| 2468-3JG | i3-2370M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Pro 64 09/12 | 09/12 |

• **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <p><i>Mainstream business performance; two spindles</i> Intel® Core™ i3-2328M processor (2 cores, 2.20GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-2370M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology</p> | | | | | | | | | | <p>Preloaded operating system²⁰ Genuine Windows® 7 Professional 64</p> <p>Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager</p> |
| Memory | <p>8GB max⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller</p> | | | | | | | | | | <p>Preloaded applications¹⁴ (only some listed) • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)</p> |
| Optical SATA disk | <p>DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™</p> | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | <p><i>Some:</i> 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio</p> | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | <p>Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)</p> | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | <p>6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None</p> | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <p><i>14.0W" (WxDxH):</i> 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm <i>6-cell:</i> from 5.11 lb (2.32kg); <i>9-cell:</i> from 5.48 lb (2.49kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication <i>6-cell (57Whr):</i> up to 7.5 hr; <i>9-cell (94Whr):</i> up to 12.3 hr</p> | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | <p>Mobile Intel HM76 Express Chipset <i>Some:</i> One slot (ExpressCard/34, ExpressCard/54) None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)</p> | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | <p>Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS</p> | | | | | | | | | | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <p><i>Some:</i> User selectable, contract required with service provider None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack</p> | | | | | | | | | | |
| Security Security chip Fingerprint reader | <p>Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip</p> | | | | | | | | | | <p>Supports ThinkVantage® technologies</p> <p>65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p> |
| Limited warranty ¹² | <p>1-year - depot repair service / service upgrades²² available</p> | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad L430 2468 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Card slot | Finger print reader | Blue-tooth | Battery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|------------|------------|---------------------|------------|---------------|------------|------------------|
| 2468-3CG | i3-2328M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Win8 Pro64 | 10/12 |
| 2468-3DG | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Express 54 | Finger | BT | 6 | Win8 Pro64 | 10/12 |
| 2468-3EG | i3-3110M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Win8 Pro64 | 10/12 |
| 2468-3FG | i5-3210M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Win8 Pro64 | 10/12 |
| 2468-3GG | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | TP 11b/g/n | Ericsson | selectable | Express 54 | Finger | BT | 6 | Win8 Pro64 | 10/12 |
| 2468-3SG | i3-2328M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Win7 Pro64 | 10/12 |
| 2468-3RG | i3-3110M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Win7 Pro64 | 10/12 |
| 2468-3QG | i5-3210M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Win7 Pro64 | 10/12 |
| 2468-3PG | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Express 54 | Finger | BT | 6 | Win7 Pro64 | 10/12 |
| 2468-3NG | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | TP 11b/g/n | Ericsson | selectable | Express 54 | Finger | BT | 6 | Win7 Pro64 | 10/12 |
| 2468-4CG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 | Win7 Pro64 | 01/13 |

• **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning | <i>Mainstream business performance; two spindles</i> | | | | | | | | | | Preloaded operating system²⁰ | | | |
| Processor | Intel® Core™ i3-2328M processor (2 cores, 2.20GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology | | | | | | | | | | - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | | | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| Optical | DVD burner, 12.7mm high, fixed, not removable, tray-in | | | | | | | | | | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) | | | |
| SATA disk | Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | • All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • FingerPrint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | |
| Widescreen display | Some: 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | |
| Touch pad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm | | | | | | | | | | | | | |
| Weight ² | 6-cell: from 5.11 lb (2.32kg); 9-cell: from 5.48 lb (2.49kg) | | | | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell or 9-cell, HW Authentication | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel HM76 Express Chipset | | | | | | | | | | | | | |
| ExpressCard | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | | | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | | | | |
| Ports | One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | |
| PCIe WLAN ⁴ | Some: 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 | | | | | | | | | | | | | |
| PCIe WWAN | Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | |
| SIM card | Some: User selectable, contract required with service provider | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Intel AMT | None | | | | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | 65-watt AC adapter | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | EPEAT™ Gold rating | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | ENERGY STAR® 5.0-compliant | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | GREENGUARD® certified | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | RoHS-compliant | | | |
| | | | | | | | | | | | International Warranty Service ¹⁷ | | | |
| | | | | | | | | | | | 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |

See footnotes for more detailed information

ThinkPad L430 2468 (TopSeller) - Windows 8 - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ¹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Card slot | Finger print reader | Bat- tery Blue- toothcells | Preload | Ann Date (mm/yy) |
|--------------------------------|--|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|------------|------------|---------------------|---|------------|------------------|
| 2468-5AG | i3-3120M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT 6 | Win7 Pro64 | 03/13 |
| 2468-59G | i5-3230M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT 6 | Win7 Pro64 | 03/13 |
| 2468-58G | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Express 54 | Finger | BT 6 | Win7 Pro64 | 03/13 |
| 2468-57G | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | TP 11b/g/n | Ericsson | selectable | Express 54 | Finger | BT 6 | Win7 Pro64 | 03/13 |
| 2468-56G | i5-2520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT 6 | Win8 Pro64 | 03/13 |
| 2468-55G | i3-3120M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT 6 | Win8 Pro64 | 03/13 |
| 2468-54G | i5-3230M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT 6 | Win8 Pro64 | 03/13 |
| 2468-53G | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Express 54 | Finger | BT 6 | Win8 Pro64 | 03/13 |
| 2468-52G | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | TP 11b/g/n | Ericsson | selectable | Express 54 | Finger | BT 6 | Win8 Pro64 | 03/13 |
| 2468-6MG | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | TP 11b/g/n | Ericsson | selectable | Express 54 | None | BT 6 | Win7 Pro64 | 06/13 |
| 2468-6LG | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | TP 11b/g/n | Ericsson | selectable | Express 54 | None | BT 6 | Win8 Pro64 | 06/13 |
| 2468-6FG | i5-3230M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | None | BT 6 | Win7 Pro64 | 06/13 |
| 2468-6EG | i5-3230M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | None | BT 6 | Win8 Pro64 | 06/13 |
| 2468-6DG | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Express 54 | None | BT 6 | Win7 Pro64 | 06/13 |
| 2468-6CG | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Express 54 | None | BT 6 | Win8 Pro64 | 06/13 |
| 2468-6BG | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | TP 11b/g/n | Ericsson | selectable | Express 54 | None | BT 6 | Win7 Pro64 | 06/13 |
| 2468-6AG | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | TP 11b/g/n | Ericsson | selectable | Express 54 | None | BT 6 | Win8 Pro64 | 06/13 |
| 2468-69G | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | TP 11b/g/n | Ericsson | selectable | Express 54 | Finger | BT 6 | Win7 Pro64 | 06/13 |
| 2468-68G | i5-3230M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | TP 11b/g/n | Ericsson | selectable | Express 54 | Finger | BT 6 | Win8 Pro64 | 06/13 |
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology Intel Core i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) | | |
| Optical | DVD burner, 12.7mm high, fixed, not removable, tray-in | | | | | | | | | | | | |
| SATA disk | Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | |
| Widescreen display | Some: 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | |
| Touch pad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm | | | | | | | | | | | | |
| Weight ² | 6-cell: from 5.11 lb (2.32kg); 9-cell: from 5.48 lb (2.49kg) | | | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell or 9-cell, HW Authentication | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | | | | | | | | | | | | |
| Chipset | Mobile Intel HM76 Express Chipset | | | | | | | | | | | | |
| ExpressCard | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | | | |
| Ports | One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | |
| PCIe WLAN ⁴ | Some: 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 | | | | | | | | | | | | |
| PCIe WWAN | Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | |
| SIM card | Some: User selectable, contract required with service provider | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | |
| Fingerprint reader | Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | |

See footnotes for more detailed information

ThinkPad L430 2468 (TopSeller) - Windows 8 - III

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Card slot | Finger print reader | Bat- tery Blue- tooth cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|----------|------------|---------------------|-----------------------------|--------------|------------------|
| 2468-6KG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | None | BT | 6 Win7 Pro64 | 06/13 |
| 2468-6JG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | None | BT | 6 Win8 Pro64 | 06/13 |
| 2468-67G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 Win7 Pro64 | 06/13 |
| 2468-66G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | Finger | BT | 6 Win8 Pro64 | 06/13 |
| 2468-6HG | i3-3120M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | None | BT | 6 Win7 Pro64 | 06/13 |
| 2468-6GG | i3-3120M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Express 54 | None | BT | 6 Win8 Pro64 | 06/13 |

• **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | |
|--------------------------------|--|---|
| Positioning Processor | <i>Mainstream business performance; two spindles</i> Intel® Core™ i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Core!® WinDVD® (DVD±RW) • Core! Burn.Now™ Lenovo Edition (DVD±RW) • Core! DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| Widescreen display | Some: 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | Supports ThinkVantage® technologies |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass | |
| Touch pad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | |
| ThinkLight™ | None | |
| Dimensions ³ | <i>14.0W"</i> (WxDxH): 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm | |
| Weight ² | <i>6-cell:</i> from 5.11 lb (2.32kg); <i>9-cell:</i> from 5.48 lb (2.49kg) | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | |
| Battery - type | Lithium Ion 6-cell or 9-cell, HW Authentication | |
| Battery - life ¹⁰ | <i>6-cell (57Whr):</i> up to 7.5 hr; <i>9-cell (94Whr):</i> up to 12.3 hr | |
| Chipset | Mobile Intel HM76 Express Chipset | |
| ExpressCard | One slot (ExpressCard/34, ExpressCard/54) | |
| Smart Card read | None | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 | |
| PCIe WWAN | Wireless WAN upgradable | |
| SIM card | None | |
| Modem | None | |
| Bluetooth™ | Bluetooth 4.0 wireless | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | |
| Intel AMT | None | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | |

See footnotes for more detailed information

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| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Smart Card Reader | Card slot | Finger print reader | Blue-tooth | Bat-Workhorse (W) Pre-load | Ann Date (mm/yy) |
|--|--|--------|---------------------|--------|-------------------------------|--------------------------|---------------------------|-------------------|--------------|---------------------|---|----------------------------|------------------|
| 2465-33G | i5-3360M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 6205 ²⁸ | WWAN upg | None | Smart Exp 54 | Finger BT 6 | W G | Pro 64 | 06/12 |
| 2465-32G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | Smart Exp 54 | Finger BT 6 | W G | Pro 64 | 06/12 |
| 2465-29G | i5-3360M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | None Exp 54 | Finger BT 9 | G | Pro 64 | 06/12 |
| 2465-2AG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | None Exp 54 | Finger BT 6 | G | Pro 64 | 06/12 |
| 2465-2BG | i5-3360M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None Exp 54 | Finger BT 6 | G | Pro 64 | 06/12 |
| 2465-2CG | i5-3320M | 4GBx1 | 14.0" HD | No | 320G 7200 | Intel 2200 | WWAN upg | None | None Exp 54 | None BT 6 | G | Pro 64 | 06/12 |
| 2465-2DG | i5-3360M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None Exp 54 | Finger BT 9 | G | Pro 64 | 06/12 |
| 2465-2EG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None Exp 54 | Finger BT 6 | G | Pro 64 | 06/12 |
| 2465-2FG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None Exp 54 | None No 6 | G | Pro 64 | 06/12 |
| 2465-5WG | i5-2520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | Ericsson | selectable | None Exp 54 | Finger BT 6 | | Pro 64 | 10/12 |
| 2465-5VG | i5-2520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Smart Exp 54 | Finger BT 6 | | Pro 64 | 10/12 |
| 2465-5UG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | None Exp 54 | Finger BT 6 | | Pro 64 | 10/12 |
| 2465-5TG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 2200 | WWAN upg | None | None Exp 54 | Finger BT 6 | | Pro 64 | 10/12 |
| 2465-5SG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | TP 11b/g/n | None | None | None Exp 54 | Finger BT 6 | | Pro 64 | 10/12 |
| 2465-5RG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | TP 11b/g/n | None | None | None Exp 54 | Finger BT 6 | | Pro 64 | 10/12 |
| 2465-5QG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11b/g/n | None | None | None Exp 54 | Finger BT 6 | | Pro 64 | 10/12 |
| 2465-5PG | i5-2520M | 2GBx1 | 14.0" HD | 720p | 320G 7200 | TP 11b/g/n | None | None | None Exp 54 | Finger BT 6 | | Pro 64 | 10/12 |
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000 , DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3360M processor (2 cores, 2.80GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology | | | | | | | | | | Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 | | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) | | |
| mSATA™ SSD | None | | | | | | | | | | • ThinkVantage System Update • ThinkVantage Power Manager | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) | | |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 14.0W" (WxDxH): 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm 6-cell: from 5.11 lb (2.32kg); 9-cell: from 5.48 lb (2.49kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset <i>Some:</i> One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 | | | | | | | | | | | | |
| PCIe WWAN | <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None <i>Some:</i> Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | |
| Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad L430 2465 (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | PCIe Mini Card SIM card | Finger print reader | Blue-tooth | Bat-tery cells | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------------|----------------------------|-------------------------|---------------------|------------|----------------|--------------------|------------|------------------|
| 2465-62G | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 6205 ²⁸ | WWAN upg | None | Finger | BT | 6 | G | Win8 Pro64 | 10/12 |
| 2465-65G | i5-3320M | 4GBx1 | 14.0" HD | None | 320G 7200 | Intel 2200 | WWAN upg | None | None | No | 6 | G | Win8 Pro64 | 10/12 |
| 2465-63G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | Finger | BT | 6 | G | Win8 Pro64 | 10/12 |
| 2465-64G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | Finger | BT | 6 | G | Win8 Pro64 | 10/12 |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|---|
| Positioning Processor | <i>Mainstream business performance; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Preloaded applications⁵ (only some listed) |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | | | | | | | | | | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Skype™ |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | Supports ThinkVantage® technologies |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | |
| Touch pad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm | | | | | | | | | | |
| Weight ² | 6-cell: from 5.11 lb (2.32kg); 9-cell: from 5.48 lb (2.49kg) | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell or 9-cell, HW Authentication | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | | | | | | | | | | |
| Chipset | Mobile Intel HM76 Express Chipset | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| Ports | One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | |
| PCIe WLAN ⁴ | <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | |
| SIM card | None | | | | | | | | | | |
| Modem | None | | | | | | | | | | |
| Bluetooth™ | <i>Some:</i> Bluetooth 4.0 wireless | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | |
| Fingerprint reader | <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad L430 2465 (Optimus)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Card slot | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------------|---------------------------|------------|---------------------|------------|----------------|---------|------------------|
| 2465-5YG | i5-2520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 6205 ²⁸ | None | Express 54 | Finger | BT | 6 | Pro 64 | 10/12 |
| 2465-5XG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 6205 | None | Express 54 | Finger | BT | 6 | Pro 64 | 10/12 |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|---|--|
| Positioning Processor | <i>Mainstream business performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>14.0W" (WxDxH):</i> 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm <i>6-cell:</i> from 5.16 lb (2.34kg); <i>9-cell:</i> from 5.52 lb (2.51kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication <i>6-cell (57Whr):</i> up to 5.6 hr; <i>9-cell (94Whr):</i> up to 9.3 hr | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset One slot (ExpressCard/34, ExpressCard/54) None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 None None None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | 90-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad L430 2466 (Onsite)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ² rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Smart Card Reader | Card slot | Finger print reader | Blue-tooth | Bat- tery cells | Workhorse (W) Global (G) Pre- load (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------------|----------------------------|-------------------|-----------|---------------------|------------|-----------------|--|----------|
| 2466-33G | i5-3360M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 6205 ²⁸ | WWAN upg | Smart | Exp 54 | Finger | BT | 6 | W G P Pro 64 | 06/12 |
| 2466-32G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | Smart | Exp 54 | Finger | BT | 6 | W G P Pro 64 | 06/12 |
| 2466-3BG | i5-3360M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | Exp 54 | Finger | BT | 9 | G P Pro 64 | 06/12 |
| 2466-3CG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | Exp 54 | Finger | BT | 6 | G P Pro 64 | 06/12 |
| 2466-3DG | i5-3360M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | Exp 54 | Finger | BT | 6 | G P Pro 64 | 06/12 |
| 2466-3EG | i5-3360M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | Exp 54 | Finger | BT | 9 | G P Pro 64 | 06/12 |
| 2466-3FG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | Exp 54 | Finger | BT | 6 | G P Pro 64 | 06/12 |

• Part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3360M processor (2 cores, 2.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology | | | | | | | | | | | Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | | Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) | |
| mSATA™ SSD | None | | | | | | | | | | | • ThinkVantage System Update • ThinkVantage Power Manager • Microsoft® Office preloaded; purchase a product key to activate | |
| Widescreen display | Some: 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | | • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | Supports ThinkVantage® technologies | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | | 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |
| Touch pad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm | | | | | | | | | | | | |
| Weight ² | 6-cell: from 5.11 lb (2.32kg); 9-cell: from 5.48 lb (2.49kg) | | | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell or 9-cell, HW Authentication | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | | | | | | | | | | | | |
| Chipset | Mobile Intel HM76 Express Chipset | | | | | | | | | | | | |
| ExpressCard | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | | |
| Smart Card read | Some: Smart Card reader | | | | | | | | | | | | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | | | |
| Ports | One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | | | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad L430 2466 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ^a rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Blue-tooth | Bat-tery cells | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------------|----------------------------|----------|---------------------|------------|----------------|--------------------|------------|------------------|
| 2466-62G | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Intel 6205 ²⁸ | WWAN upg | None | Finger | BT | 6 | G P | Win8 Pro64 | 10/12 |
| 2466-63G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | Finger | BT | 6 | G P | Win8 Pro64 | 10/12 |
| 2466-64G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | Finger | BT | 6 | G P | Win8 Pro64 | 10/12 |

• Part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|---|
| Positioning Processor | <p><i>Mainstream business performance; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology</p> | | | | | | | | | | <p>Preloaded operating system²⁰ - Windows® 8 Pro 64-bit</p> <p>Preloaded applications⁵ (only some listed)</p> |
| Memory | <p>8GB max⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller</p> | | | | | | | | | | <p>- Windows 7 models</p> <ul style="list-style-type: none"> • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical SATA disk | <p>DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable</i> <i>Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™</i></p> | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | <p><i>Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio</i> <i>Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio</i></p> | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | <p>Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)</i></p> | | | | | | | | | | <p>- Windows 8 models</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <p>- All models</p> <ul style="list-style-type: none"> • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Keyboard TrackPoint® | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | |
| Touch pad ThinkLight™ | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.94" x 9.57" x 1.17–1.24"; 354mm x 243mm x 29.6–31.4mm | | | | | | | | | | |
| Weight ² | 6-cell: from 5.11 lb (2.32kg); 9-cell: from 5.48 lb (2.49kg) | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell or 9-cell, HW Authentication | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | | | | | | | | | | |
| Chipset | Mobile Intel HM76 Express Chipset | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| Ports | One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | |
| SIM card | None | | | | | | | | | | |
| Modem | None | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | 65-watt AC adapter |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | EPEAT™ Gold rating |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | ENERGY STAR® 5.0-compliant |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | GREENGUARD® certified |
| | | | | | | | | | | | RoHS-compliant |
| | | | | | | | | | | | International Warranty Service ¹⁷ |
| | | | | | | | | | | | 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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Lenovo® ThinkPad L530



Lenovo ThinkPad L530



Lenovo ThinkPad L530



Lenovo ThinkPad L530



Lenovo ThinkPad L530



Lenovo Sport Backpack - Blue 0B47298
Lenovo Sport Backpack - Red 0A33896
Lenovo Sport Backpack - Grey 0B47301

ThinkPad L530 2481 (TopSeller)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ² rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Card slot | Finger print reader | Bat-tery Blue-tooth cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|------------|---------------------|---------------------------|---------|------------------|
| 2481-2RG | i3-2370M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Finger | BT 6 | Pro 64 | 06/12 |
| 2481-2SG | i5-3210M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Finger | BT 6 | Pro 64 | 06/12 |
| 2481-2TG | i5-3210M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Finger | BT 6 | Pro 64 | 06/12 |
| 2481-2VG | i3-2370M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Finger | BT 6 | Pro 64 | 07/12 |
| 2481-2WG | Cel B820 | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Finger | BT 6 | Pro 64 | 07/12 |
| 2481-2UG | i5-3210M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | 16GB mSATA | None | Finger | BT 6 | Pro 64 | 07/12 |
| 2481-3AG | i3-2328M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT 6 | Pro 64 | 09/12 |
| 2481-3NG | i5-3210M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | 16GB mSATA | Express 54 | Finger | BT 6 | Pro 64 | 09/12 |
| 2481-3MG | i5-3210M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT 6 | Pro 64 | 09/12 |
| 2481-3LG | i5-3210M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT 6 | Pro 64 | 09/12 |
| 2481-3KG | i3-2370M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT 6 | Pro 64 | 09/12 |

• **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | |
|---|---|---|
| Positioning Processor | <i>Mainstream business performance; two spindles</i> Intel® Celeron® B820 processor (2 cores, 1.70GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1333MHz) Intel Core™ i3-2328M processor (2 cores, 2.20GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-2370M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications¹⁴ (only some listed) • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | |
| mSATA™ SSD | <i>Some:</i> mSATA Solid State Drive (SSD), via PCIe Mini Card slot | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics, Intel HD Graphics 3000, or Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm <i>6-cell:</i> from 5.69 lb (2.58kg); <i>9-cell:</i> from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication <i>6-cell (57Whr):</i> up to 7.5 hr; <i>9-cell (94Whr):</i> up to 12.3 hr | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset <i>Some:</i> One slot (ExpressCard/34, ExpressCard/54) None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 | |
| PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> Wireless WAN upgradable None None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | 65-watt AC adapter EPEAT™ Gold rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) GREENGUARD® certified (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

ThinkPad L530 2481 (TopSeller) - DOS

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ^a rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Card slot | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|-----------|---------------------|------------|----------------|----------|------------------|
| 2481-2QG | Pen B970 | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | None | Finger | BT | 6 | DOS-Lic. | 06/12 |

- Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

| | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Mainstream business performance; two spindles</i> Intel® Pentium® B970 processor (2 cores, 2.30GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1333MHz) | | | | | | | | | | Preloaded operating system ²⁰ - DOS-Lic. |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable</i> <i>Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™</i> | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | <i>Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio</i> <i>Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio</i> | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | Intel HD Graphics in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)</i> | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm</i> <i>6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg)</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication <i>6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr</i> | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset None None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Wireless WAN upgradable None None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | Supports ThinkVantage® technologies |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | 65-watt AC adapter RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad L530 2481 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Card slot | Finger print reader | Battery Blue-tooth cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|------------|---------------------|--------------------------|---------|------------------|
| 2481-35G | i3-3110M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 10/12 |
| 2481-36G | i5-3210M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 10/12 |
| 2481-37G | i5-3210M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 10/12 |
| 2481-38G | i3-2328M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 10/12 |
| 2481-39G | i5-3210M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | 16GB mSATA | Express 54 | Finger | BT | 6 | Win8 Pro64 10/12 |
| 2481-3TG | i3-2328M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 10/12 |
| 2481-3SG | i3-3110M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 10/12 |
| 2481-3RG | i5-3210M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 10/12 |
| 2481-3QG | i5-3210M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 10/12 |
| 2481-3TG | i3-2328M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | 16GB mSATA | Express 54 | Finger | BT | 6 | Win7 Pro64 10/12 |
| 2481-48G | i5-2520M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 01/13 |
| 2481-5EG | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win7 Pro64 06/13 |
| 2481-5DG | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win8 Pro64 06/13 |
| 2481-5AG | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 06/13 |
| 2481-59G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 06/13 |

• Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

| | | |
|--|---|---|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ i3-2328M processor (2 cores, 2.20GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | |
| mSATA™ SSD | Some: mSATA Solid State Drive (SSD), via PCIe Mini Card slot | |
| Widescreen display | Some: 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset One slot (ExpressCard/34, ExpressCard/54) None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Some: Wireless WAN upgradable None None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | |
| Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available | | Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² |

See footnotes for more detailed information

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ThinkPad L530 2481 (TopSeller) - Windows 8 - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Card slot | Finger print reader | Battery Blue-tooth cells | Preload | Ann Date (mm/yy) |
|--|---|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|------------|---------------------|--------------------------|---|------------------|
| 2481-52G | i3-3120M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 03/13 |
| 2481-4ZG | i5-3230M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 03/13 |
| 2481-4YG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 03/13 |
| 2481-4XG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | 16GB mSATA | Express 54 | Finger | BT | 6 | Win7 Pro64 03/13 |
| 2481-4WG | i5-2520M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 03/13 |
| 2481-4VG | i3-3120M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 03/13 |
| 2481-4UG | i5-3230M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 03/13 |
| 2481-4TG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 03/13 |
| 2481-4SG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | 16GB mSATA | Express 54 | Finger | BT | 6 | Win8 Pro64 03/13 |
| 2481-5QG | i3-3120M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win7 Pro64 06/13 |
| 2481-5PG | i3-3120M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win8 Pro64 06/13 |
| 2481-5NG | i5-3230M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win7 Pro64 06/13 |
| 2481-5MG | i5-3230M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win8 Pro64 06/13 |
| 2481-5LQ | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win7 Pro64 06/13 |
| 2481-5KG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win8 Pro64 06/13 |
| 2481-5JG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | 16GB mSATA | Express 54 | None | BT | 6 | Win7 Pro64 06/13 |
| 2481-5HG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | TP 11b/g/n | 16GB mSATA | Express 54 | None | BT | 6 | Win8 Pro64 06/13 |
| 2481-5LQ | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 180G SSD | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win7 Pro64 06/13 |
| 2481-5FG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 180G SSD | TP 11b/g/n | WWAN upg | Express 54 | None | BT | 6 | Win8 Pro64 06/13 |
| 2481-5CG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 180G SSD | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win7 Pro64 06/13 |
| 2481-5BG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 180G SSD | TP 11b/g/n | WWAN upg | Express 54 | Finger | BT | 6 | Win8 Pro64 06/13 |
| Positioning Processor | <i>Mainstream business performance; two spindles</i> Intel® Core™ i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Hyper-Threading technology Intel Core i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000 , DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) | |
| mSATA™ SSD | Some: mSATA Solid State Drive (SSD), via PCIe Mini Card slot | | | | | | | | | | | |
| Widescreen display | Some: 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)</i> | | | | | | | | | | Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset One slot (ExpressCard/34, ExpressCard/54) None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Some: Wireless WAN upgradable None None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | |

See footnotes for more detailed information

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Smart Card Reader | Card slot | Finger print reader | Blue-tooth | Bat- tery cells | Workhorse (W) Global (G) | Pre-load | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------------|----------------------------|-------------------|-----------|---------------------|------------|-----------------|--------------------------|----------|------------------|
| 2478-25G | i5-3360M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | Intel 6205 ²⁸ | WWAN upg | None | None | Finger | BT | 9 | G | Pro 64 | 06/12 |
| 2478-26G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | None | Finger | BT | 6 | G | Pro 64 | 06/12 |
| 2478-27G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | None | None | No | 6 | G | Pro 64 | 06/12 |
| 2478-28G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 2200 | WWAN upg | None | None | Finger | BT | 6 | G | Pro 64 | 06/12 |
| 2478-29G | i5-3320M | 4GBx1 | 15.6" HD | None | 320G 7200 | Intel 2200 | WWAN upg | None | None | None | BT | 6 | G | Pro 64 | 06/12 |
| 2478-2AG | i5-3360M | 4GBx1 | 15.6" HD+ | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None | Finger | BT | 9 | G | Pro 64 | 06/12 |
| 2478-2BG | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None | Finger | BT | 6 | G | Pro 64 | 06/12 |
| 2478-2CG | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None | None | No | 6 | G | Pro 64 | 06/12 |
| 2478-2XG | i5-3360M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | Smart | Exp 54 | Finger | BT | 9 | G | Pro 64 | 06/12 |
| 2478-2YG | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | Smart | Exp 54 | Finger | BT | 6 | G | Pro 64 | 06/12 |
| 2478-32G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | Smart | Exp 54 | Finger | BT | 6 | W G | Pro 64 | 06/12 |
| 2478-33G | i5-3360M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | Smart | Exp 54 | Finger | BT | 9 | W G | Pro 64 | 06/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|--|--|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3360M processor (2 cores, 2.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm <i>6-cell:</i> from 5.69 lb (2.58kg); <i>9-cell:</i> from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication <i>6-cell (57Whr):</i> up to 7.5 hr; <i>9-cell (94Whr):</i> up to 12.3 hr | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset <i>Some:</i> One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 Wireless WAN upgradable None None <i>Some:</i> Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |
| | | Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Smart Card Reader | Card slot | Finger print reader | Blue-tooth | Bat-tery cells | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|------------|-------------------|-----------|---------------------|------------|----------------|--------------|
| 2478-5GG | i5-2520M | 4GBx1 | 15.6" HD+ | 720p | 128G SSD | Intel 2200 | WWAN upg | None | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-5FG | i5-2520M | 4GBx1 | 15.6" HD+ | 720p | 128G SSD | Intel 2200 | Ericsson | selectable | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-5EG | i5-2520M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | Intel 2200 | Ericsson | selectable | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-5DG | i5-2520M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | Smart | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-5CG | i5-2520M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 2200 | WWAN upg | None | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-5BG | i5-2520M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 2200 | WWAN upg | None | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-5AG | i5-2520M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | TP 11b/g/n | None | None | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-59G | i5-2520M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | TP 11b/g/n | None | None | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-58G | i5-2520M | 2GBx1 | 15.6" HD | 720p | 320G 7200 | TP 11b/g/n | None | None | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |
| 2478-57G | i5-2520M | 2GBx1 | 15.6" HD | 720p | 320G 7200 | TP 11b/g/n | None | None | None | Exp 54 | Finger | BT | 6 | Pro 64 10/12 |

• A depot repair service 3-year limited warranty

| | | |
|--------------------------------|---|---|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | Preloaded applications¹⁴ (only some listed) • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 3000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass | |
| Touch pad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | |
| ThinkLight™ | None | |
| Dimensions ³ | <i>15.6W" (WxDxH):</i> 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm | |
| Weight ² | <i>6-cell:</i> from 5.69 lb (2.58kg); <i>9-cell:</i> from 6.05 lb (2.75kg) | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | |
| Battery - type | Lithium Ion 6-cell or 9-cell, HW Authentication | |
| Battery - life ¹⁰ | <i>6-cell (57Whr):</i> up to 7.5 hr; <i>9-cell (94Whr):</i> up to 12.3 hr | |
| Chipset | Mobile Intel HM76 Express Chipset | |
| ExpressCard | <i>Some:</i> One slot (ExpressCard/34, ExpressCard/54) | |
| Smart Card read | <i>Some:</i> Smart Card reader | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | <i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 | |
| PCIe WWAN | <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | |
| Modem | None | |
| Bluetooth™ | Bluetooth 4.0 wireless | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | |
| Intel AMT | None | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

ThinkPad L530 2478 (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Finger print reader | Blue-tooth | Bat-tery cells | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------------|---------------------------|----------|---------------------|------------|----------------|--------------------|------------|------------------|
| 2478-62G | i7-3520M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | Intel 6205 ²⁸ | WWAN upg | None | Finger | BT | 6 | G | Win8 Pro64 | 10/12 |
| 2478-4NG | i5-3320M | 4GBx1 | 15.6" HD | None | 320G 7200 | Intel 2200 | WWAN upg | None | None | No | 6 | G | Win8 Pro64 | 10/12 |
| 2478-63G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | Finger | BT | 6 | G | Win8 Pro64 | 10/12 |
| 2478-64G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | Finger | BT | 6 | G | Win8 Pro64 | 10/12 |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit Preloaded applications⁵ (only some listed) | | | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) | | | |
| mSATA™ SSD | None | | | | | | | | | | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>15.6W" (WxDxH):</i> 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm <i>6-cell:</i> from 5.69 lb (2.58kg); <i>9-cell:</i> from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication <i>6-cell (57Whr):</i> up to 7.5 hr; <i>9-cell (94Whr):</i> up to 12.3 hr | | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset None None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 | | | | | | | | | | | | | |
| PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Wireless WAN upgradable None None <i>Some:</i> Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad L530 2479 (Onsite)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Smart Card Reader | Card slot | Finger print reader | Blue-tooth | Bat-tery cells | Workhorse (W) Global (G) | Pre-load | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------------|----------------------------|-------------------|-----------|---------------------|------------|----------------|--------------------------|----------|------------------|
| 2479-32G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 ²⁸ | WWAN upg | Smart | Exp 54 | Finger | BT | 6 | W G P | Pro 64 | 06/12 |
| 2479-33G | i5-3360M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | Smart | Exp 54 | Finger | BT | 9 | W G P | Pro 64 | 06/12 |
| 2479-3BG | i5-3360M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | None | Finger | BT | 9 | G P | Pro 64 | 06/12 |
| 2479-3CG | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | None | Finger | BT | 6 | G P | Pro 64 | 06/12 |
| 2479-3DG | i5-3360M | 4GBx1 | 15.6" HD+ | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None | Finger | BT | 9 | G P | Pro 64 | 06/12 |
| 2479-3EG | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | None | Finger | BT | 6 | G P | Pro 64 | 06/12 |
| 2479-44G | i5-3360M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | Smart | Exp 54 | Finger | BT | 9 | | Pro 64 | 06/12 |
| 2479-45G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | Smart | Exp 54 | Finger | BT | 6 | | Pro 64 | 06/12 |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | Mainstream business performance; two spindles Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3360M processor (2 cores, 2.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology | | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 | | | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | | |
| Optical SATA disk | DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touch pad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>15.6W"</i> (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm <i>6-cell:</i> from 5.69 lb (2.58kg); <i>9-cell:</i> from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication <i>6-cell (57Whr):</i> up to 7.5 hr; <i>9-cell (94Whr):</i> up to 12.3 hr | | | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard Reader Ports | Mobile Intel HM76 Express Chipset <i>Some:</i> One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | | Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad L530 2479 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Finger print reader | Blue-tooth | Bat-tery cells | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------------|---------------------------|----------|---------------------|------------|----------------|--------------------|------------|------------------|
| 2479-62G | i7-3520M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | Intel 6205 ²⁸ | WWAN upg | None | Finger | BT | 6 | G P | Win8 Pro64 | 10/12 |
| 2479-63G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Intel 6205 | WWAN upg | None | Finger | BT | 6 | G P | Win8 Pro64 | 10/12 |
| 2479-64G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Intel 6205 | WWAN upg | None | Finger | BT | 6 | G P | Win8 Pro64 | 10/12 |

• Part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|---|
| Positioning Processor | <p><i>Mainstream business performance; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology</p> | | | | | | | | | | <p>Preloaded operating system²⁰ - Windows® 8 Pro 64-bit</p> <p>Preloaded applications⁵ (only some listed)</p> |
| Memory | <p>8GB max⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller</p> | | | | | | | | | | <p>- Windows 7 models</p> <ul style="list-style-type: none"> Lenovo® Message Center Plus ThinkVantage Product Recovery Access Connections™ ThinkVantage Power Manager Lenovo SimpleTap Adobe® Reader® Windows Live™ Essentials Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW) Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical SATA disk | <p>DVD burner, 12.7mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™</p> | | | | | | | | | | <p>- Windows 8 models</p> <ul style="list-style-type: none"> Lenovo Support Lenovo Companion Lenovo QuickLaunch AccuWeather PC Device Stage Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) <p>- All models</p> <ul style="list-style-type: none"> Lenovo Solution Center Password Manager ThinkVantage System Update Fingerprint Software (fingerprint models) Lenovo Cloud Storage by SugarSync Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | <p><i>Some:</i> 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio</p> | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | <p>Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)</p> | | | | | | | | | | |
| Keyboard TrackPoint® | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys | | | | | | | | | | |
| Touch pad ThinkLight™ | TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None | | | | | | | | | | |
| Dimensions ³ | 15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm | | | | | | | | | | |
| Weight ² | 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell or 9-cell, HW Authentication | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr | | | | | | | | | | |
| Chipset | Mobile Intel HM76 Express Chipset | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| Ports | One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | |
| SIM card | None | | | | | | | | | | |
| Modem | None | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | |
| | | | | | | | | | | | <p>Supports ThinkVantage® technologies</p> <p>65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p> |

See footnotes for more detailed information

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Lenovo® ThinkPad T430



Lenovo ThinkPad T430



Lenovo ThinkPad T430



Lenovo ThinkPad T430



Lenovo ThinkPad T430



Lenovo ThinkPad T430 with
ThinkPad Port Replicator Series 3 with USB 3.0
433615W

ThinkPad T430 2344 (TopSeller)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Finger print reader | Blue-tooth | Bat-tery cells | Intel AMT | Intel vPro | Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|---------------------------|---------------------|------------|----------------|-----------|------------|-----------------|----------|
| 2344-4TG | i5-3210M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Backlit | Intel 6205 ²⁸ | WWAN upg | Finger | BT | 6 | None | None | Pro 64 | 06/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | |
|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.7 hr; <i>9-cell (94Whr):</i> up to 16.2 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 32.5 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None None Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

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ThinkPad T430 2344 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Smart Card Reader | Finger print reader | Bat-tery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|-------------------|---------------------|----------------|-----------|------------|------------|------------------|
| 2344-BTG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 ²⁸ | WWAN upg | Smart | Finger | 6 | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2344-BSG | i5-3210M | 4GBx2 | 14.0" HD | 720p | 500G 7200 | None | Intel 2200 | WWAN upg | Smart | Finger | 6 | None | No | Win7 Pro64 | 10/12 |
| 2344-BJG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro | Win7 Pro64 | 10/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | |
|--|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , dual-channel memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| mSATA™ SSD | None | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | Supports ThinkVantage® technologies |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.7 hr; <i>9-cell (94Whr):</i> up to 16.2 hr; <i>6-cell plus 9-cell Slice battery (94Whr):</i> up to 32.5 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 | |
| PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant | |
| Security Security chip Fingerprint reader | Power On Authentication, supports the security chip AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

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ThinkPad T430 2344 (Optimus) - TopSeller

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁵ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Finger-print reader | Bat-tery cells | Intel vPro | Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|---------------------|---------------------------|----------|---------------------|----------------|------------|-----------------|----------|
| 2344-4SG | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Backlit | Intel 2200 | Ericsson | Lenovo | Finger | 6 | None | Pro 64 | 06/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • FingerPrint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.4 hr; <i>9-cell (94Whr):</i> up to 15.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 31.6 hr | | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Security Security chip FingerPrint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad T430 2344 (Optimus) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Smart Card Reader | Finger print reader | Battery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|---------------------------|-------------------|---------------------|---------------|-----------|------------|------------|------------------|
| 2344-BUG | i7-3520M | 4GBx2 | 14.0" HD+ | 500G 7200 | None | Intel 6205 ²⁸ | WWAN upg | Smart | Finger | 9 | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2344-BRG | i5-3210M | 4GBx1 | 14.0" HD+ | 500G 7200 | None | Intel 2200 | WWAN upg | Smart | Finger | 6 | None | No | Win7 Pro64 | 10/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | |
|---|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.4 hr; <i>9-cell (94Whr):</i> up to 15.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 31.6 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 | |
| PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | Supports ThinkVantage® technologies |
| Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available | | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Finger print reader | Battery cells | Intel AMT | Intel vPro | Global (G) GMP (P) Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|---------------------------|---------------------|---------------|-----------|------------|------------------------------------|----------|
| 2347-GAG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | None | Intel 6205 ²⁸ | WWAN upg | Finger | 6 | iAMT | vPro | G Pro 64 | 06/12 |
| 2347-G8G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | None | Intel 6205 | WWAN upg | Finger | 6 | iAMT | vPro | G Pro 64 | 06/12 |
| 2347-GBG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | Finger | 6 | iAMT | vPro | G Pro 64 | 06/12 |
| 2347-G5G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | Finger | 6 | iAMT | vPro | G Pro 64 | 06/12 |
| 2347-G3G | i7-3520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | Finger | 6 | iAMT | vPro | G Pro 64 | 06/12 |
| 2347-G2G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | None | Intel 6205 | WWAN upg | Finger | 6 | iAMT | vPro | G Pro 64 | 06/12 |
| 2347-KUG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | Finger | 6 | None | None | Pro 64 | 10/12 |
| 2347-KZG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | None | Intel 6205 | WWAN upg | Finger | 6 | None | None | Pro 64 | 10/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|---|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.7 hr; <i>9-cell (94Whr):</i> up to 16.2 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 32.5 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

ThinkPad T430 2347 (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Finger print reader | Blue-tooth cells | Bat-tery | Global (G) Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|---------------------------|---------------------|------------------|----------|-----------------------|--------------------|------------|------------------|
| 2347-J9G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 ²⁸ | WWAN upg | Finger | BT | 6 | vPro | G | Win8 Pro64 | 10/12 |
| 2347-J8G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | None | Intel 6205 | WWAN upg | Finger | BT | 6 | vPro | G | Win8 Pro64 | 10/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | <ul style="list-style-type: none"> • Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <ul style="list-style-type: none"> - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.7 hr; <i>9-cell (94Whr):</i> up to 16.2 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 32.5 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

See footnotes for more detailed information

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ThinkPad T430 2347 (Optimus)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Smart Card Reader | Finger-print reader | Bat-tery Intel AMT | Global (G) Intel vPro (P) Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|----------|-------------------|---------------------|--------------------|---|--------------|
| 2347-G9G | i7-3520M | 4GBx1 | 14.0" HD+ | 180G SSD | None | Intel 6205 ²⁸ | upg | None | None | Finger | 9 iAMT | vPro G | Pro 64 06/12 |
| 2347-G7G | i7-3520M | 4GBx1 | 14.0" HD+ | 500G 7200 | None | Intel 6205 | upg | None | None | Finger | 9 iAMT | vPro G | Pro 64 06/12 |
| 2347-G6G | i5-3320M | 4GBx1 | 14.0" HD+ | 500G 7200 | None | Intel 6205 | upg | None | None | Finger | 9 iAMT | vPro G | Pro 64 06/12 |
| 2347-G4G | i5-3320M | 4GBx1 | 14.0" HD+ | 320G 7200 | None | Intel 6205 | upg | None | None | Finger | 9 iAMT | vPro G | Pro 64 06/12 |
| 2347-KXG | i5-2520M | 4GBx1 | 14.0" HD+ | 180G SSD | Backlit | Intel 6300 ²⁸ | Ericsson selectable | Smart | Finger | 9 None | No | | Pro 64 10/12 |
| 2347-KWG | i5-2520M | 4GBx1 | 14.0" HD+ | 128G SSD | None | Intel 6205 | upg | None | None | Finger | 9 None | No | Pro 64 10/12 |
| 2347-KVG | i5-2520M | 4GBx1 | 14.0" HD+ | 500G 7200 | Backlit | Intel 6205 | Ericsson selectable | Smart | Finger | 9 None | No | | Pro 64 10/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|---|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 or 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | 14.0W" (WxDxH): 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.4 hr; <i>9-cell (94Whr):</i> up to 15.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 31.6 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Smart Card Reader | Finger print reader | Bat-tery cells | Global (G) Intel vPro | Intel GMP (P) | Pre-load | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|---------------------------|-------------------|---------------------|----------------|-----------------------|---------------|----------|------------------|
| 2349-HFG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | None | Intel 6205 ²⁸ | upg | None | Smart | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-H3G | i5-3210M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Backlit | Intel 6205 | Ericsson | Lenovo | None | Fing 6 | None | No | Pro 64 | 06/12 |
| 2349-GZG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | None | Intel 6205 | Ericsson | selectable | Smart | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-GAG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | None | Intel 6205 | upg | None | None | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-GDG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 128G SSD | None | Intel 6205 | upg | None | None | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-G8G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | None | Intel 6205 | upg | None | None | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-G5G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 | upg | None | None | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-GCG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | None | Intel 6205 | upg | None | None | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-G3G | i7-3520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | None | Intel 6205 | upg | None | None | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-G2G | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | None | Intel 6205 | upg | None | None | Fing 6 | iAMT vPro | G P | Pro 64 | 06/12 |
| 2349-HNG | i5-3320M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | None | Intel 6205 | upg | None | None | No 6 | iAMT vPro | G P | Pro 64 | 07/12 |
| 2349-LLG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | None | Intel 6205 | upg | None | None | Fing 6 | None | No | Pro 64 | 10/12 |
| 2349-LQG | i5-2520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | None | Intel 6205 | upg | None | None | Fing 6 | None | No | Pro 64 | 10/12 |

| | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | | Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> Lenovo® Solution Center Lenovo Message Center Plus ThinkVantage Product Recovery Access Connections™ Fingerprint Software (fingerprint models) ThinkVantage System Update ThinkVantage Power Manager Lenovo Cloud Storage by SugarSync Lenovo SimpleTap Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security 2012 (30 days of virus definitions) Adobe® Reader® Skype™ for Windows Evernote® Intel Small Business Advantage RapidBoot HDD Accelerator Symantec™ VIP Windows Live™ Essentials Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW) Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 14.0W" (WxDxH): 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm 6-cell: from 4.77 lb (2.17kg); 9-cell: from 5.13 lb (2.33kg) Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication 6-cell (57Whr): up to 9.7 hr; 9-cell (94Whr): up to 16.2 hr; 9-cell plus 9-cell Slice battery (94Whr): up to 32.5 hr | | | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | | |
| SIM card | <i>Some:</i> Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required <i>Some:</i> User selectable, contract required with service provider | | | | | | | | | | | | | | |
| Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad T430 2349 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ² rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Finger print reader | Battery cells | Intel AMT | Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|---------------------------|----------|---------------------|---------------|-----------|------------|--------------------|---------|------------------|
| 2349-KDG | i5-3210M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 ²⁸ | WWAN upg | None | Finger | 6 | None | No | Win7 Pro64 | 10/12 | |
| 2349-KCG | i5-3210M | 4GBx1 | 14.0" HD+ | 180G SSD | Backlit | Intel 6205 | Ericsson | Lenovo | Finger | 6 | None | No | Win7 Pro64 | 10/12 | |
| 2349-JQG | i7-3520M | 4GBx1 | 14.0" HD | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro G P | Win8 Pro64 | 10/12 | |
| 2349-JPG | i5-3320M | 4GBx1 | 14.0" HD+ | 180G SSD | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro G P | Win8 Pro64 | 10/12 | |
| 2349-JNG | i5-3320M | 4GBx1 | 14.0" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro G P | Win8 Pro64 | 10/12 | |
| 2349-JMG | i5-3320M | 4GBx1 | 14.0" HD | 320G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro G P | Win8 Pro64 | 10/12 | |
| 2349-JJG | i5-3210M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 | WWAN upg | None | Finger | 6 | None | No | Win8 Pro64 | 10/12 | |
| 2349-JHG | i5-3210M | 4GBx1 | 14.0" HD+ | 180G SSD | Backlit | Intel 6205 | Ericsson | Lenovo | Finger | 6 | None | No | Win8 Pro64 | 10/12 | |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.7 hr; <i>9-cell (94Whr):</i> up to 16.2 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 32.5 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T430 2349 (Onsite) - Windows 8 - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ⁹ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Card SIM card | Smart Card Reader | Finger print reader | Bat-tery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|---------------|-------------------|---------------------|----------------|-----------|------------|------------|------------------|
| 2349-PHG | i5-3220M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 ²⁸ | upg | None | Smart | Finger | 6 | iAMT | vPro | Win7 Pro64 | 03/13 |
| 2349-PGG | i5-3320M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 | upg | None | Smart | Finger | 6 | iAMT | vPro | Win8 Pro64 | 03/13 |
| 2349-N8G | i5-3230M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 | upg | None | None | Finger | 6 | None | No | Win8 Pro64 | 03/13 |
| 2349-N7G | i5-3230M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 | upg | None | None | Finger | 6 | None | No | Win7 Pro64 | 03/13 |
| 2349-N6G | i5-3230M | 4GBx1 | 14.0" HD+ | 180G SSD | Backlit | Intel 6205 | Ericsson | selectable | None | Finger | 6 | None | No | Win8 Pro64 | 03/13 |
| 2349-N5G | i5-3230M | 4GBx1 | 14.0" HD+ | 180G SSD | Backlit | Intel 6205 | Ericsson | selectable | None | Finger | 6 | None | No | Win7 Pro64 | 03/13 |
| 2349-Q4G | i5-3320M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 | upg | None | Smart | None | 6 | iAMT | vPro | Win8 Pro64 | 06/13 |
| 2349-Q3G | i5-3320M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 | upg | None | Smart | None | 6 | iAMT | vPro | Win7 Pro64 | 06/13 |
| 2349-Q2G | i5-3230M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 | upg | None | None | None | 6 | None | No | Win8 Pro64 | 06/13 |
| 2349-PZG | i5-3230M | 4GBx1 | 14.0" HD | 500G 7200 | Backlit | Intel 6205 | upg | None | None | None | 6 | None | No | Win7 Pro64 | 06/13 |
| 2349-PYG | i5-3230M | 4GBx1 | 14.0" HD+ | 180G SSD | Backlit | Intel 6205 | Ericsson | selectable | None | None | 6 | None | No | Win8 Pro64 | 06/13 |
| 2349-PXG | i5-3230M | 4GBx1 | 14.0" HD+ | 180G SSD | Backlit | Intel 6205 | Ericsson | selectable | None | None | 6 | None | No | Win7 Pro64 | 06/13 |
| 2349-Q6G | i5-3230M | 4GBx1 | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6205 | Ericsson | selectable | None | None | 6 | None | No | Win8 Pro64 | 06/13 |
| 2349-Q5G | i5-3230M | 4GBx1 | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6205 | Ericsson | selectable | None | None | 6 | None | No | Win7 Pro64 | 06/13 |

| | | |
|--------------------------------|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000. DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | |
| Optical | DVD burner, 12.7mm Ultrabay Enhanced, removable | |
| Ultrabay | One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access | |
| SATA disk | <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | |
| Touchpad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | 14.0W" (WxDxH): 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm | |
| Weight ² | <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) | |
| Case material | <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication | |
| Battery - life ¹⁰ | <i>6-cell (57Whr):</i> up to 9.7 hr; <i>9-cell (94Whr):</i> up to 16.2 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 32.5 hr | |
| Chipset | Mobile Intel QM77 Express Chipset | |
| ExpressCard | One slot (ExpressCard/34) | |
| Smart Card read | <i>Some:</i> Smart Card reader | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | |
| PCIe WWAN | <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | |
| Modem | None | |
| IEEE 1394 | None | |
| Bluetooth™ | Bluetooth 4.0 wireless | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | |
| Intel AMT | <i>Some:</i> Intel Active Management Technology (iAMT) | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

ThinkPad T430 2349 (Optimus) - Onsite

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Smart Card Reader | Battery cells | Intel AMT | Intel vPro | Global (G) GMP (P) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|------------|-------------------|---------------|-----------|------------|--------------------|------------------|
| 2349-H2G | i7-3520M | 4GBx1 | 14.0" HD+ | 500G 7200 | Backlit | Intel 6205 ²⁸ | Ericsson | selectable | None | 9 | iAMT | vPro | Pro 64 | 06/12 |
| 2349-G9G | i7-3520M | 4GBx1 | 14.0" HD+ | 180G SSD | None | Intel 6205 | WWAN upg | None | None | 9 | iAMT | vPro | G P | Pro 64 06/12 |
| 2349-G7G | i7-3520M | 4GBx1 | 14.0" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | 9 | iAMT | vPro | G P | Pro 64 06/12 |
| 2349-G6G | i5-3320M | 4GBx1 | 14.0" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | 9 | iAMT | vPro | G P | Pro 64 06/12 |
| 2349-G4G | i5-3320M | 4GBx1 | 14.0" HD+ | 320G 7200 | None | Intel 6205 | WWAN upg | None | None | 9 | iAMT | vPro | G P | Pro 64 06/12 |
| 2349-KMG | i7-3520M | 4GBx2 | 14.0" HD+ | 500G 7200 | None | Intel 6300 ²⁸ | WWAN upg | None | Smart | 6 | iAMT | vPro | Pro 64 | 10/12 |
| 2349-LPG | i5-2520M | 4GBx1 | 14.0" HD+ | 180G SSD | Backlit | Intel 6300 | Ericsson | selectable | Smart | 9 | None | No | Pro 64 | 10/12 |
| 2349-LNG | i5-2520M | 4GBx1 | 14.0" HD+ | 128G SSD | None | Intel 6205 | WWAN upg | None | None | 9 | None | No | Pro 64 | 10/12 |
| 2349-LMG | i5-2520M | 4GBx1 | 14.0" HD+ | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Smart | 9 | None | No | Pro 64 | 10/12 |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--|---|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 or 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.4 hr; <i>9-cell (94Whr):</i> up to 15.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 31.6 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | Supports ThinkVantage® technologies |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T430 2349 (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics memory | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Mini Card SIM card | Smart Card Reader | Finger print reader | Bat-tery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------------------------|-------------------------------|-------------------|--------------------------|---------------------------|--------------------|-------------------|---------------------|----------------|-----------|------------|------------|------------------|
| 2349-KBG | i5-3210M | 4GBx1 | 14.0" HD+ | 1GB | 500G 7200 | Backlit | Intel 6205 ²⁸ | Ericsson | Lenovo | Smart | Finger | 6 | None | No | Win7 Pro64 | 10/12 |
| 2349-KAG | i7-3520M | 4GBx1 | 14.0" HD+ | 1GB | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | None | Finger | 9 | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2349-JGG | i5-3210M | 4GBx1 | 14.0" HD+ | 1GB | 500G 7200 | Backlit | Intel 6205 | Ericsson | Lenovo | Smart | Finger | 6 | None | No | Win8 Pro64 | 10/12 |
| 2349-JFG | i7-3520M | 4GBx1 | 14.0" HD+ | 1GB | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | None | Finger | 9 | iAMT | vPro | Win8 Pro64 | 10/12 |
| 2349-N4G | i5-3230M | 4GBx1 | 14.0" HD+ | 2GB | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Smart | Finger | 6 | None | No | Win8 Pro64 | 03/13 |
| 2349-N3G | i5-3230M | 4GBx1 | 14.0" HD+ | 2GB | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Smart | Finger | 6 | None | No | Win7 Pro64 | 03/13 |
| 2349-PWG | i5-3230M | 4GBx1 | 14.0" HD+ | 2GB | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Smart | None | 6 | None | No | Win8 Pro64 | 06/13 |
| 2349-PVG | i5-3230M | 4GBx1 | 14.0" HD+ | 2GB | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Smart | None | 6 | None | No | Win7 Pro64 | 06/13 |

| | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | | Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB or 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.4 hr; <i>9-cell (94Whr):</i> up to 15.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 31.6 hr | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS <i>Some:</i> Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required <i>Some:</i> User selectable, contract required with service provider | | | | | | | | | | | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad T430i 2344 (TopSeller)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Finger print reader | Blue-tooth | Bat-tery cells | Intel vPro | Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|---------------------|---------------------------|---------------------|------------|----------------|------------|-----------------|----------|
| 2344-4UG | i3-2370M | 4GBx1 | 14.0" HD | 720p | 320G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | BT | 6 | None | Pro 64 | 06/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i3-2370M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.7 hr; <i>9-cell (94Whr):</i> up to 16.2 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 32.5 hr | | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad T430i 2344 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ² rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Finger print reader | Battery cells | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|---------------------|---------------|------------|------------|------------------|
| 2344-BDG | i3-3110M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | 6 | None | Win7 Pro64 | 10/12 |
| 2344-72G | i3-3110M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | 6 | None | Win8 Pro64 | 10/12 |
| 2344-FHG | i3-3120M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Backlit | Intel 6205 ²⁸ | WWAN upg | Finger | 6 | None | Win8 Pro64 | 03/13 |
| 2344-FGG | i3-3120M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Backlit | Intel 6205 | WWAN upg | Finger | 6 | None | Win7 Pro64 | 03/13 |
| 2344-FFG | i3-3120M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | 6 | None | Win8 Pro64 | 03/13 |
| 2344-FEG | i3-3120M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | 6 | None | Win7 Pro64 | 03/13 |
| 2344-FYG | i3-3120M | 4GBx1 | 14.0" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | WWAN upg | None | 6 | None | Win8 Pro64 | 06/13 |
| 2344-FXG | i3-3120M | 4GBx1 | 14.0" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | WWAN upg | None | 6 | None | Win7 Pro64 | 06/13 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | Some: 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)</i> | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.4" x 9.13" x 1.17–1.18"; 340.5mm x 232.0mm x 29.8–29.9mm <i>6-cell:</i> from 4.77 lb (2.17kg); <i>9-cell:</i> from 5.13 lb (2.33kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.7 hr; <i>9-cell (94Whr):</i> up to 16.2 hr; <i>6-cell plus 9-cell Slice battery (94Whr):</i> up to 32.5 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |
| | | Supports ThinkVantage® technologies |
| | | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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Lenovo® ThinkPad T430s



Lenovo ThinkPad T430s



Lenovo ThinkPad T430s with
Lenovo Essential Notebook Stand 45J9292,
notebook, keyboard and mouse



Lenovo ThinkPad T430s with
USB 3.0 Secure 750GB Hard Drive
0A65616



Lenovo ThinkPad T430s



Lenovo ThinkPad T430s with
USB 3.0 Secure 750GB Hard Drive
0A65616

ThinkPad T430s 2355

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Bay battery cells | Bat-tery cells | Global (G) Intel vPro | Global (G) GMP (P) | Pre-load | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|----------|---------------------|-------------------|----------------|-----------------------|--------------------|----------|------------------|
| 2355-HMG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | None | Intel 6205 ²⁸ | WWAN upg | None | Finger | No | 6 | vPro | G | Pro 64 | 06/12 |
| 2355-HLG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | No | 6 | vPro | G | Pro 64 | 06/12 |
| 2355-HKG | i7-3520M | 4GBx2 | 14.0" HD+ | 720p | 180G SSD | None | Intel 6205 | WWAN upg | None | Finger | No | 6 | vPro | G | Pro 64 | 06/12 |
| 2355-HFG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | None | Intel 6205 | WWAN upg | None | Finger | No | 6 | vPro | G | Pro 64 | 06/12 |
| 2355-HDG | i5-3320M | 4GBx1 | 14.0" HD+ | None | 320G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 3 | 6 | vPro | G | Pro 64 | 06/12 |
| 2355-G3G | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | No | 6 | vPro | G | Pro 64 | 06/12 |
| 2355-G2G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | None | Intel 6205 | WWAN upg | None | Finger | No | 6 | vPro | G | Pro 64 | 06/12 |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Positioning Processor | <p><i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology</p> | | | | | | | | | | | <p>Preloaded operating system²⁰ Genuine Windows® 7 Professional 64</p> |
| Memory | <p>16GB max⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller</p> | | | | | | | | | | | <p>Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager</p> |
| Optical Bay battery Ultrabay SATA disk | <p>DVD burner, 9.5mm Ultrabay slim, removable <i>Some:</i> ThinkPad Battery 43 (3-cell, bay) (0A36310), used in Option Bay One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive</p> | | | | | | | | | | | <p>Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)</p> |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | <p><i>Some:</i> 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio</p> | | | | | | | | | | | |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | <p>Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)</p> | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | <p>6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions</p> | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <p><i>14.0W" (WxDxH):</i> 13.5" x 9.05" x 0.83–1.02"; 343mm x 230mm x 21.2–26.0mm <i>6-cell:</i> from 3.96 lb (1.79kg) <i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy Lithium Ion 6-cell, supports optional Ultrabay Slim battery as 2nd battery, HW authentication <i>6-cell (43.2Whr):</i> up to 7.6 hr; <i>6-cell plus 3-cell Bay battery (31.3Whr):</i> up to 13.2 hr</p> | | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | <p>Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) via ExpressCard adapter Two USB 3.0, one powered USB 2.0, ethernet (RJ-45), VGA DB-15, Mini DisplayPort (Mini DP / Thunderbolt™ combo port on i7 integrated model, switch via BIOS)</p> | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <p>Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack</p> | | | | | | | | | | | |
| Security Security chip Fingerprint reader | <p>Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip</p> | | | | | | | | | | | <p>Supports ThinkVantage® technologies</p> |
| Limited warranty ¹² | <p>3-years/1-yr battery - depot repair service / service upgrades²² available</p> | | | | | | | | | | | <p>65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p> |

See footnotes for more detailed information

ThinkPad T430s 2355 (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Finger print reader | Battery cells | Bay battery cells | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|---------------------|---------------|-------------------|---------------------------|------------------|
| 2355-K7G | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | None | Intel 6205 ²⁸ | WWAN upg | Finger | 6 | No | vPro G | Win8 Pro64 10/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) |
| Optical Bay battery | DVD burner, 9.5mm Ultrabay slim, removable None | <ul style="list-style-type: none"> - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Ultrabay SATA disk | One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>14.0W" (WxDxH):</i> 13.5" x 9.05" x 0.83–1.02"; 343mm x 230mm x 21.2–26.0mm <i>6-cell:</i> from 3.96 lb (1.79kg) <i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy Lithium Ion 6-cell, supports optional Ultrabay Slim battery as 2nd battery, HW authentication <i>6-cell (43.2Whr):</i> up to 7.6 hr; <i>6-cell plus 3-cell Bay battery (31.3Whr, 0A36310):</i> up to 13.2 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) via ExpressCard adapter Two USB 3.0, one powered USB 2.0, ethernet (RJ-45), VGA DB-15, Mini DisplayPort (Mini DP / Thunderbolt™ combo port on i7 integrated model, switch via BIOS) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T430s 2355 (Optimus)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | Optical or battery | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Finger print reader | Bat-tery Blue-tooth cells | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|--------------------|-------------------|--------------------------|---------------------------|---------------------|---------------------------|---------------------------|------------------|
| 2355-HJG | i5-3320M | 4GBx2 | 14.0" HD+ | 720p | 180G SSD | DVD±RW | None | Intel 6205 ²⁸ | WWAN upg | Finger | BT 6 | vPro G | Pro 64 06/12 |
| 2355-HHG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | DVD±RW | None | Intel 6205 | WWAN upg | Finger | BT 6 | vPro G | Pro 64 06/12 |
| 2355-HGG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | DVD±RW | None | Intel 6205 | WWAN upg | Finger | BT 6 | vPro G | Pro 64 06/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|--|--|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical Bay battery | DVD burner, 9.5mm Ultrabay slim, removable | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Ultrabay SATA disk | One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5200M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort or Thunderbolt (i7 integrated models); supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>14.0W" (WxDxH):</i> 13.5" x 9.05" x 0.83–1.02"; 343mm x 230mm x 21.2–26.0mm <i>6-cell:</i> from 3.96 lb (1.79kg) <i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy Lithium Ion 6-cell, supports optional Ultrabay Slim battery as 2nd battery, HW authentication <i>6-cell (43.2Whr):</i> up to 7.6 hr; <i>6-cell plus 3-cell Bay battery (31.3Whr):</i> up to 13.2 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) via ExpressCard adapter Two USB 3.0, one powered USB 2.0, ethernet (RJ-45), VGA DB-15, Mini DisplayPort | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

ThinkPad T430s 2355 (Optimus) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Finger print reader | Bat- tery Blue- tooth cells | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|---------------------|-----------------------------|---------------------------|------------------|
| 2355-K6G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | None | Intel 6205 ²⁸ | WWAN upg | Finger | BT 6 | vPro G | Win8 Pro64 10/12 |

• A depot repair service 3-year limited warranty

| | | |
|--------------------------------|---|---|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel[®] Core[™] i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | Preloaded operating system²⁰ - Windows [®] 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo [®] Message Center Plus • ThinkVantage Product Recovery • Access Connections [™] • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe [®] Reader [®] • Windows Live [™] Essentials • Corel [®] WinDVD [®] (DVD±RW) • Corel Burn.Now [™] Lenovo Edition (DVD±RW) • Corel DVD MovieFactory [®] Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft [®] Office preloaded; purchase a product key to activate • Norton [™] Internet Security (30 days of virus definitions) |
| Optical Bay battery | DVD burner, 9.5mm Ultrabay slim, removable | Supports ThinkVantage [®] technologies |
| Ultrabay | None | |
| SATA disk | One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System [™] <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA [™] SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA [®] Optimus [™] technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS[™] 5200M , PCI Express [®] x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort or Thunderbolt (i7 integrated models); supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | |
| TrackPoint [®] | TrackPoint [®] pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | |
| Touchpad | UltraNav [™] , wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | |
| ThinkLight [™] | Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | 14.0W" (WxDxH): 13.5" x 9.05" x 0.83–1.02"; 343mm x 230mm x 21.2–26.0mm | |
| Weight ² | 6-cell: from 3.96 lb (1.79kg) | |
| Case material | <i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy | |
| Battery - type | Lithium Ion 6-cell, supports optional Ultrabay Slim battery as 2nd battery, HW authentication | |
| Battery - life ¹⁰ | 6-cell (43.2Whr): up to 7.6 hr; 6-cell plus 3-cell Bay battery (31.3Whr, 0A36310): up to 13.2 hr | |
| Chipset | Mobile Intel QM77 Express Chipset | |
| ExpressCard | One slot (ExpressCard/34) | |
| Smart Card Read | None | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) via ExpressCard adapter | |
| Ports | Two USB 3.0, one powered USB 2.0, ethernet (RJ-45), VGA DB-15, Mini DisplayPort | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino [®] Advanced-N 6205, 2x2 | |
| PCIe WWAN | Wireless WAN upgradable | |
| SIM card | None | |
| Modem | None | |
| IEEE 1394 | None | |
| Bluetooth [™] | Bluetooth 4.0 wireless | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | |
| Intel AMT | Intel Active Management Technology (iAMT) | |
| Audio support | HD Audio, Realtek [®] ALC3202 codec, Dolby [®] Home Theater [®] v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT [™] Silver rating ENERGY STAR [®] 5.0-compliant GREENGUARD [®] certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T430s 2356 (Onsite)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | Optical or battery | Backlit key-board | PCIe Mini Card WWAN/ mSATA | SIM card | Smart Card Reader | Finger print reader | Power Adapter (watt) | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|---|--|--------|---------------------|--------|-------------------------------|--------------------|-------------------|----------------------------|----------|-------------------|--|----------------------|---------------------------|------------------|
| 2356-HCG | i7-3520M | 4GBx1 | 14.0" HD | 720p | 500G 7200 | DVD±RW | None | upg | None | None | Finger | 65W | vPro G P | Pro 64 06/12 |
| 2356-HBG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | DVD±RW | None | upg | None | None | Finger | 65W | vPro G P | Pro 64 06/12 |
| 2356-HAG | i7-3520M | 4GBx2 | 14.0" HD+ | 720p | 180G SSD | DVD±RW | None | upg | None | None | Finger | 65W | vPro G P | Pro 64 06/12 |
| 2356-GUG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | DVD±RW | None | upg | None | None | None | 65W | vPro G P | Pro 64 06/12 |
| 2356-GTG | i5-3320M | 4GBx1 | 14.0" HD+ | No | 320G 7200 | DVD±RW | None | upg | None | None | Finger | 65W | vPro G P | Pro 64 06/12 |
| 2356-GRG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | DVD±RW | None | upg | None | None | Finger | 65W | vPro G P | Pro 64 06/12 |
| 2356-GPG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | DVD±RW | None | upg | None | None | None | 65W | vPro G P | Pro 64 06/12 |
| 2356-GJG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | DVD±RW | None | upg | None | None | None | 65W | vPro G P | Pro 64 06/12 |
| 2356-GDG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | DVD±RW | Backlit | Ericsson selectable | None | None | Finger | 65W | vPro | Pro 64 06/12 |
| 2356-GCG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | DVD±RW | Backlit | Ericsson selectable | None | None | Finger | 90W | vPro | Pro 64 06/12 |
| 2356-GBG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Blank bezel | None | Ericsson selectable | Smart | Finger | 65W | vPro | Pro 64 06/12 | |
| 2356-G3G | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | DVD±RW | None | upg | None | None | Finger | 65W | vPro G P | Pro 64 06/12 |
| 2356-G2G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | DVD±RW | None | upg | None | None | Finger | 65W | vPro G P | Pro 64 06/12 |
| 2356-L3G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | DVD±RW | Backlit | Ericsson selectable | None | None | Finger | 65W | vPro | Pro 64 07/12 |
| 2356-L2G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | DVD±RW | None | Ericsson selectable | Smart | Finger | 65W | vPro | Pro 64 07/12 | |
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | | |
| Optical Bay battery Ultrabay SATA disk | <i>Some:</i> DVD burner, 9.5mm Ultrabay slim, removable None One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | 14.0W" (WxDxH): 13.5" x 9.05" x 0.83–1.02"; 343mm x 230mm x 21.2–26.0mm 6-cell: from 3.96 lb (1.79kg) <i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy Lithium Ion 6-cell, supports optional Ultrabay Slim battery as 2nd battery, HW authentication 6-cell (43.2Whr): up to 7.6 hr; 6-cell plus 3-cell Bay battery (31.3Whr): up to 13.2 hr | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) via ExpressCard adapter Two USB 3.0, one powered USB 2.0, ethernet (RJ-45), VGA DB-15, Mini DisplayPort (Mini DP / Thunderbolt™ combo port on i7 integrated model, switch via BIOS) | | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | 65-watt or 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad T430s 2356 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger-print reader | Bat-tery cells | Global (G) Intel vPro (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|------------|---------------------|----------------|---------------------------|----------------|------------------|
| 2356-LRG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Backlit | Intel 6205 ²⁸ | Ericsson | selectable | Finger | 6 | vPro | Win7 Pro64 | 10/12 |
| 2356-LQG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win7 Pro64 | 10/12 |
| 2356-LNG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win7 Pro64 | 10/12 |
| 2356-LDG | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | None | Intel 6205 | upg | None | Finger | 6 | vPro | G P Win8 Pro64 | 10/12 |
| 2356-LAG | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | None | Intel 6205 | upg | None | Finger | 6 | vPro | G P Win8 Pro64 | 10/12 |
| 2356-L7G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win8 Pro64 | 10/12 |
| 2356-L6G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win8 Pro64 | 10/12 |
| 2356-L5G | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win8 Pro64 | 10/12 |
| 2356-N7G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win8 Pro64 | 06/13 |
| 2356-N6G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win7 Pro64 | 06/13 |
| 2356-N3G | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win8 Pro64 | 06/13 |
| 2356-N2G | i7-3520M | 4GBx1 | 14.0" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Win7 Pro64 | 06/13 |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|---|--|---|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) |
| Optical Bay battery | DVD burner, 9.5mm Ultrabay slim, removable None | <ul style="list-style-type: none"> - Windows 7 models <ul style="list-style-type: none"> • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| UltraBay SATA disk | One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰ | <i>14.0W" (WxDxH):</i> 13.5" x 9.05" x 0.83–1.02"; 343mm x 230mm x 21.2–26.0mm <i>6-cell:</i> from 3.96 lb (1.79kg) <i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy Lithium Ion 6-cell, supports optional UltraBay Slim battery as 2nd battery, HW authentication <i>6-cell (43.2Whr):</i> up to 7.6 hr; <i>6-cell plus 3-cell Bay battery (31.3Whr, 0A36310):</i> up to 13.2 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) via ExpressCard adapter Two USB 3.0, one powered USB 2.0, ethernet (RJ-45), VGA DB-15, Mini DisplayPort (Mini DP / Thunderbolt™) combo port on i7 integrated model, switch via BIOS) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T430s 2356 (Optimus) - Onsite

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ¹ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Finger-print reader | Bat-tery cells | Global (G) Intel vPro (P) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|---------------------------|------------|---------------------|----------------|---------------------------|--------------|
| 2356-H9G | i5-3320M | 4GBx2 | 14.0" HD+ | 720p | 180G SSD | None | Intel 6205 ²⁸ | WWAN upg | None | Finger | 6 | vPro G P | Pro 64 06/12 |
| 2356-H8G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 320G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | vPro G P | Pro 64 06/12 |
| 2356-H7G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | vPro G P | Pro 64 06/12 |
| 2356-L4G | i5-3320M | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | Pro 64 07/12 |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--|--|--|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical Bay battery | DVD burner, 9.5mm Ultrabay slim, removable | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Ultrabay SATA disk | One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5200M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort or Thunderbolt (i7 integrated models); supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² | 14.0W" (WxDxH): 13.5" x 9.05" x 0.83–1.02"; 343mm x 230mm x 21.2–26.0mm <i>6-cell:</i> from 3.96 lb (1.79kg) | |
| Case material Battery - type Battery - life ¹⁰ | <i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy Lithium Ion 6-cell, supports optional Ultrabay Slim battery as 2nd battery, HW authentication <i>6-cell (43.2Whr):</i> up to 7.6 hr; <i>6-cell plus 3-cell Bay battery (31.3Whr):</i> up to 13.2 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) via ExpressCard adapter Two USB 3.0, one powered USB 2.0, ethernet (RJ-45), VGA DB-15, Mini DisplayPort | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T430s 2356 (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Bat-tery cells | Global (G) Intel vPro (P) | GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|------------|---------------------|----------------|---------------------------|---------|------------|------------------|
| 2356-LPG | i7-3520M | 4GBx2 | 14.0" HD+ | 240G FDE SSD | Backlit | Intel 6205 ²⁸ | Ericsson | selectable | Finger | 6 | vPro | | Win7 Pro64 | 10/12 |
| 2356-LCG | i5-3320M | 4GBx1 | 14.0" HD+ | 180G SSD | None | Intel 6205 | upg | None | Finger | 6 | vPro | G P | Win8 Pro64 | 10/12 |
| 2356-LBG | i5-3320M | 4GBx1 | 14.0" HD+ | 500G 7200 | None | Intel 6205 | upg | None | Finger | 6 | vPro | G P | Win8 Pro64 | 10/12 |
| 2356-L8G | i7-3520M | 4GBx2 | 14.0" HD+ | 240G FDE SSD | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | | Win8 Pro64 | 10/12 |
| 2356-MMG | i5-3320M | 4GBx1 | 14.0" HD+ | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | | Win8 Pro64 | 03/13 |
| 2356-MLG | i5-3320M | 4GBx1 | 14.0" HD+ | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | | Win7 Pro64 | 03/13 |
| 2356-N5G | i7-3520M | 8GBx1 | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | | Win8 Pro64 | 06/13 |
| 2356-N4G | i7-3520M | 8GBx1 | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6205 | Ericsson | selectable | Finger | 6 | vPro | | Win7 Pro64 | 06/13 |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | <i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Preloaded applications⁵ (only some listed) | | | |
| Optical Bay battery | DVD burner, 9.5mm Ultrabay slim, removable None | | | | | | | | | | <ul style="list-style-type: none"> - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) <ul style="list-style-type: none"> - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <ul style="list-style-type: none"> - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) | | | |
| Ultrabay SATA disk | One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5200M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort or Thunderbolt (i7 integrated models); supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | | | |
| Keyboard TrackPoint® | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | | | | | | | | | | | | | |
| Touchpad | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | |
| ThinkLight™ | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.5" x 9.05" x 0.83–1.02"; 343mm x 230mm x 21.2–26.0mm | | | | | | | | | | | | | |
| Weight ² | 6-cell: from 3.96 lb (1.79kg) | | | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell, supports optional Ultrabay Slim battery as 2nd battery, HW authentication | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (43.2Whr): up to 7.6 hr; 6-cell plus 3-cell Bay battery (31.3Whr, 0A36310): up to 13.2 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel QM77 Express Chipset | | | | | | | | | | | | | |
| ExpressCard | One slot (ExpressCard/34) | | | | | | | | | | | | | |
| Smart Card Read | None | | | | | | | | | | | | | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) via ExpressCard adapter | | | | | | | | | | | | | |
| Ports | Two USB 3.0, one powered USB 2.0, ethernet (RJ-45), VGA DB-15, Mini DisplayPort | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | | | | | | | | | | | | | |
| PCIe WWAN | <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology (iAMT) | | | | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |

See footnotes for more detailed information

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Lenovo® ThinkPad T430u



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Lenovo ThinkPad T430u

ThinkPad T430u 8614 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|------------|---------------------|------------|----------------|------------|------------------|
| 8614-BDG | i5-3337U | 4GBx2 | 14.0" HD | 720p | 1T 5400 | Intel 2230 | Ericsson | selectable | Finger | BT | 3 | Win7 Pro64 | 06/13 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology | | | | | | | | | | |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution: 2560x1600 (Mini-DisplayPort or HDMI) @60Hz</i> | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm | | | | | | | | | | |
| Weight ² | <i>3-cell:</i> from 4.08 lb (1.85kg) | | | | | | | | | | |
| Case material | <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | | | | | | | | | | |
| Battery - type | Integrated Li-Polymer 3-cell | | | | | | | | | | |
| Battery - life ¹⁰ | <i>3-cell (47Whr):</i> up to 7.1 hr | | | | | | | | | | |
| Chipset | Mobile Intel UM77 Express Chipset | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| Ports | Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | |
| PCIe WLAN ⁴ | 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter | | | | | | | | | | |
| PCIe WWAN | Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | |
| SIM card | User selectable, contract required with service provider | | | | | | | | | | |
| Modem | None | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | |
| | Preloaded operating system²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) | | | | | | | | | | |
| | Supports ThinkVantage® technologies | | | | | | | | | | |
| | 65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | | | | | | | |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

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(G-ABBA1-10) May 2014

ThinkPad T430u 8614 (Optimus) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁵ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|---------------------|------------|----------------|------------|------------------|
| 8614-ATG | i3-3227U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2230 | 24GB mSATA | Finger | BT | 3 | Win8 Pro64 | 03/13 |
| 8614-ASG | i3-3227U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2230 | 24GB mSATA | Finger | BT | 3 | Win7 Pro64 | 03/13 |

- Small and medium business (SMB) model(s), part of the WE TopSeller™ Program
- A depot repair service 3-year limited warranty

| | | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i3-3227U processor (2 cores, 1.90GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology | | | | | | | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | | | | |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | | |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | Preloaded applications⁵ (only some listed) | | | | |
| mSATA™ SSD | mSATA Solid State Drive (SSD), via PCIe Mini Card slot | | | | | | | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials | | | | |
| Widescreen display | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA GeForce® GT 620M , PCI Express® x16, 1GB memory, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution: 2560x1600 (Mini-DisplayPort or HDMI)@60Hz</i> | | | | | | | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ | <i>14.0W" (WxDxH):</i> 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm | | | | | | | | | | | |
| Weight ² | <i>3-cell:</i> from 4.12 lb (1.87kg) | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | | | | | | | | | | | |
| Battery - type | Integrated Li-Polymer 3-cell | | | | | | | | | | | |
| Battery - life ¹⁰ | <i>3-cell (47Whr):</i> up to 6.6 hr | | | | | | | | | | | |
| Chipset | Mobile Intel UM77 Express Chipset | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | | |
| Ports | Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter | | | | | | | | | | | |
| PCIe WWAN | None | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | Supports ThinkVantage® technologies | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack | | | | | | | 65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | | |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

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ThinkPad T430u 3353 (TopSeller) - Onsite

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|------------|---------------------|------------|----------------|---------|------------------|
| 3353-38G | i5-3317U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | Ericsson | selectable | Finger | BT | 3 | Pro 64 | 08/12 |
| 3353-37G | i5-3317U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2230 | 24GB mSATA | None | Finger | BT | 3 | Pro 64 | 08/12 |

• **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | |
|--------------------------------|--|--|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology | Preloaded operating system ^{20F} Genuine Windows® 7 Professional 64 |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | Preloaded applications ¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials |
| mSATA™ SSD | <i>Some:</i> mSATA Solid State Drive (SSD), via PCIe Mini Card slot | |
| Widescreen display | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution:</i> 2560x1600 (Mini-DisplayPort or HDMI)@60Hz | |
| Keyboard TrackPoint® | 6-row, spill-resistant, multimedia Fn keys | |
| Touchpad ThinkLight™ | TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | <i>14.0W" (WxDxH):</i> 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm | |
| Weight ² | <i>3-cell:</i> from 4.08 lb (1.85kg) | |
| Case material | <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | |
| Battery - type | Integrated Li-Polymer 3-cell | |
| Battery - life ¹⁰ | <i>3-cell (47Whr):</i> up to 7.1 hr | |
| Chipset | Mobile Intel UM77 Express Chipset | |
| ExpressCard | None | |
| Smart Card read | None | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter | |
| PCIe WWAN | <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | |
| Modem | None | |
| IEEE 1394 | None | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | |
| Intel AMT | None | Supports ThinkVantage® technologies |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack | 65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

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ThinkPad T430u 3353 (TopSeller) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Bat- tery Blue- tooth cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|------------|---------------------|-----------------------------|---------|------------------|
| 3353-3MG | i5-3317U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | Ericsson | selectable | Finger | BT | 3 | Win7 Pro64 10/12 |
| 3353-3LG | i5-3317U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2230 | 24GB mSATA | None | Finger | BT | 3 | Win7 Pro64 10/12 |
| 3353-3JG | i5-3317U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | Ericsson | selectable | Finger | BT | 3 | Win8 Pro64 10/12 |
| 3353-3HG | i5-3317U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2230 | 24GB mSATA | None | Finger | BT | 3 | Win8 Pro64 10/12 |
| 3353-3TG | i5-3337U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | Ericsson | selectable | Finger | BT | 3 | Win8 Pro64 03/13 |
| 3353-3SG | i5-3337U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | Ericsson | selectable | Finger | BT | 3 | Win7 Pro64 03/13 |
| 3353-3RG | i5-3337U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2230 | 24GB mSATA | None | Finger | BT | 3 | Win8 Pro64 03/13 |
| 3353-3QG | i5-3337U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2230 | 24GB mSATA | None | Finger | BT | 3 | Win7 Pro64 03/13 |

• **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | |
|--------------------------------|---|--|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology | Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | - <i>Some:</i> Windows 8 Pro 64-bit |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | Preloaded applications⁵ (only some listed) |
| mSATA™ SSD | <i>Some:</i> mSATA Solid State Drive (SSD), via PCIe Mini Card slot | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials |
| Widescreen display | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | - All models • Lenovo Solution Center • Passport Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution: 2560x1600 (Mini-DisplayPort or HDMI) @60Hz</i> | Supports ThinkVantage® technologies |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | 65-watt AC adapter |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ | ThinkPad Roll Cage (bottom cover) |
| Touchpad | UltraNav™, buttonless touchpad below keyboard, multi-touch | EPEAT™ Silver rating |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | ENERGY STAR® 5.0-compliant |
| Dimensions ³ | 14.0W" (WxDxH): 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm | GREENGUARD® certified |
| Weight ² | 3-cell: from 4.08 lb (1.85kg) | RoHS-compliant |
| Case material | <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | International Warranty Service ¹⁷ |
| Battery - type | Integrated Li-Polymer 3-cell | 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Battery - life ¹⁰ | 3-cell (47Whr): up to 7.1 hr | |
| Chipset | Mobile Intel UM77 Express Chipset | |
| ExpressCard | None | |
| Smart Card read | None | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter | |
| PCIe WWAN | <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | |
| Modem | None | |
| IEEE 1394 | None | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | |
| Intel AMT | None | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

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ThinkPad T430u 3353 (Optimus) - TopSeller (Onsite)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Blue-tooth | Battery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|----------|---------------------|------------|---------------|---------|------------------|
| 3353-36G | i5-3317U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | None | None | Finger | BT | 3 | Pro 64 | 08/12 |

• Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

| | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology | | | | | | | | | | Preloaded operating system ^{20F} Genuine Windows® 7 Professional 64 |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | Ready to install applications ¹⁴ (only some listed) |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager |
| mSATA™ SSD | None | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) |
| Widescreen display | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | <ul style="list-style-type: none"> Lenovo® Solution Center Lenovo Message Center Plus ThinkVantage Product Recovery Access Connections™ Fingerprint Software (fingerprint models) ThinkVantage System Update ThinkVantage Power Manager Lenovo Cloud Storage by SugarSync Lenovo SimpleTap Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security 2012 (30 days of virus definitions) Adobe® Reader® Skype™ for Windows Evernote® Intel Small Business Advantage RapidBoot HDD Accelerator Symantec™ VIP Windows Live™ Essentials |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA GeForce® GT 620M , PCI Express® x16, 1GB memory, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution: 2560x1600 (Mini-DisplayPort or HDMI) @60Hz</i> | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | |
| Dimensions ³ | <i>14.0W" (WxDxH):</i> 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm | | | | | | | | | | |
| Weight ² | <i>3-cell:</i> from 4.12 lb (1.87kg) | | | | | | | | | | |
| Case material | <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | | | | | | | | | | |
| Battery - type | Integrated Li-Polymer 3-cell | | | | | | | | | | |
| Battery - life ¹⁰ | <i>3-cell (47Whr):</i> up to 6.6 hr | | | | | | | | | | |
| Chipset | Mobile Intel UM77 Express Chipset | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| Ports | Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | |
| PCIe WLAN ⁴ | 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter | | | | | | | | | | |
| PCIe WWAN | None | | | | | | | | | | |
| SIM card | None | | | | | | | | | | |
| Modem | None | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

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ThinkPad T430u 3353 (Optimus) - TopSeller (Onsite) - Win 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | SIM card | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|----------|---------------------|------------|----------------|------------|------------------|
| 3353-3KG | i5-3317U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | None | None | Finger | BT | 3 | Win7 Pro64 | 10/12 |
| 3353-3GG | i5-3317U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | None | None | Finger | BT | 3 | Win8 Pro64 | 10/12 |
| 3353-3PG | i5-3337U | 4GBx1 | 14.0" HD | 720p | 180G SSD | Intel 2230 | None | None | Finger | BT | 3 | Win8 Pro64 | 03/13 |
| 3353-3NG | i5-3337U | 4GBx1 | 14.0" HD | 720p | 180G SSD | Intel 2230 | None | None | Finger | BT | 3 | Win7 Pro64 | 03/13 |

• Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

| | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <p><i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology</p> | | | | | | | | | | | <p>Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> |
| Memory | <p>8GB max⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets</p> | | | | | | | | | | | <p>- Some: Windows 8 Pro 64-bit</p> |
| Optical SATA disk | <p>None Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™</p> | | | | | | | | | | | <p>Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions)</p> |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | <p>14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio</p> | | | | | | | | | | | |
| Camera | <p>HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus</p> | | | | | | | | | | | |
| Graphics | <p>NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA GeForce® GT 620M, PCI Express® x16, 1GB memory, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution: 2560x1600 (Mini-DisplayPort or HDMI) @60Hz</i></p> | | | | | | | | | | | |
| Keyboard | <p>6-row, spill-resistant, multimedia Fn keys</p> | | | | | | | | | | | |
| TrackPoint® | <p>TrackPoint® pointing device, Internet Scroll Bar¹³</p> | | | | | | | | | | | |
| Touchpad | <p>UltraNav™, buttonless touchpad below keyboard, multi-touch</p> | | | | | | | | | | | |
| ThinkLight™ | <p>Illuminates the keyboard to improve visibility in low-light conditions</p> | | | | | | | | | | | |
| Dimensions ³ | <p><i>14.0W" (WxDxH):</i> 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm</p> | | | | | | | | | | | |
| Weight ² | <p><i>3-cell:</i> from 4.12 lb (1.87kg)</p> | | | | | | | | | | | |
| Case material | <p><i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic</p> | | | | | | | | | | | |
| Battery - type | <p>Integrated Li-Polymer 3-cell</p> | | | | | | | | | | | |
| Battery - life ¹⁰ | <p><i>3-cell (47Whr):</i> up to 6.6 hr</p> | | | | | | | | | | | |
| Chipset | <p>Mobile Intel UM77 Express Chipset</p> | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | |
| Multicard reader | <p>4-in-1 reader (MMC, SD, SDHC, SDXC)</p> | | | | | | | | | | | |
| Ports | <p>Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45)</p> | | | | | | | | | | | |
| PCIe Mini Card | <p>Two PCI Express Mini Card slots</p> | | | | | | | | | | | |
| PCIe WLAN ⁴ | <p>11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter</p> | | | | | | | | | | | |
| PCIe WWAN | None | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | |
| Bluetooth™ | <p>Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter</p> | | | | | | | | | | | |
| Ethernet | <p>Realtek® RTL8111F Gigabit Network Connection</p> | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | |
| Audio support | <p>HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack</p> | | | | | | | | | | | <p>Supports ThinkVantage® technologies</p> |
| Security | <p>Power-on password, hard disk password, supervisor password, security keyhole</p> | | | | | | | | | | | <p>65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p> |
| Security chip | <p>Trusted Platform Module, TCG 1.2-compliant</p> | | | | | | | | | | | |
| Fingerprint reader | <p>AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip</p> | | | | | | | | | | | |
| Limited warranty ¹² | <p>3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available</p> | | | | | | | | | | | |

See footnotes for more detailed information
 WE model(s) withdrawn effective January 2014

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ThinkPad T430u 3352

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ² rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Finger print reader | Blue-tooth | Bat-tery cells | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|---------------------|------------|----------------|--------------------|---------|------------------|
| 3352-2SG | i5-3427U | 4GBx1 | 14.0" HD | 720p | 128G SSD | TP 11a/b/g/n | None | Finger | BT | 3 | G | Pro 64 | 08/12 |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology | | | | | | | | | | Preloaded operating system ^{20F} Genuine Windows® 7 Professional 64 | |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | |
| Optical | None | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials | |
| SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution:</i> 2560x1600 (Mini-DisplayPort or HDMI) @60Hz | | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | | | | | | | | | | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |
| TrackPoint® | TrackPoint® pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ | <i>14.0W" (WxDxH):</i> 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm | | | | | | | | | | | |
| Weight ² | <i>3-cell:</i> from 4.08 lb (1.85kg) | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | | | | | | | | | | | |
| Battery - type | Integrated Li-Polymer 3-cell | | | | | | | | | | | |
| Battery - life ¹⁰ | <i>3-cell (47Whr):</i> up to 7.1 hr | | | | | | | | | | | |
| Chipset | Mobile Intel UM77 Express Chipset | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | | |
| Ports | Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter | | | | | | | | | | | |
| PCIe WWAN | None | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | | |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

ThinkPad T430u 3352 (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Bat- tery Blue- tooth cells | Global (G) (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|------------|---------------------|-----------------------------|----------------|--------------|------------------|
| 3352-3KG | i5-3427U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | Ericsson | selectable | Finger | BT | 3 | Win7 Pro64 | 10/12 |
| 3352-3JG | i5-3427U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | Intel 2230 | Ericsson | selectable | Finger | BT | 3 | Win7 Pro64 | 10/12 |
| 3352-3CG | i5-3427U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | None | None | Finger | BT | 3 | G Win8 Pro64 | 10/12 |
| 3352-3TG | i5-3427U | 4GBx1 | 14.0" HD | 720p | 128G SSD | TP 11a/b/g/n | None | None | Finger | BT | 3 | Win7 Pro64 | 12/12 |
| 3352-3SG | i5-3427U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11a/b/g/n | 24GB mSATA | None | Finger | BT | 3 | Win7 Pro64 | 12/12 |

• A depot repair service 3-year limited warranty

| | | |
|--------------------------------|--|---|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology | Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | |
| mSATA™ SSD | <i>Some:</i> mSATA Solid State Drive (SSD), via PCIe Mini Card slot | |
| Widescreen display | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution:</i> 2560x1600 (Mini-DisplayPort or HDMI) @60Hz | |
| Keyboard TrackPoint® | 6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ | |
| Touchpad ThinkLight™ | UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | 14.0W" (WxDxH): 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm | |
| Weight ² | 3-cell: from 4.08 lb (1.85kg) | |
| Case material | <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | |
| Battery - type | Integrated Li-Polymer 3-cell | |
| Battery - life ¹⁰ | 3-cell (47Whr): up to 7.1 hr | |
| Chipset | Mobile Intel UM77 Express Chipset | |
| ExpressCard | None | |
| Smart Card read | None | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + Bluetooth combo adapter | |
| PCIe WWAN | <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | |
| Modem | None | |
| IEEE 1394 | None | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | |
| Intel AMT | None | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |
| | Supports ThinkVantage® technologies | |
| | 65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

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ThinkPad T430u 6273 (Onsite)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ² rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Finger print reader | Blue-tooth | Bat-tery cells | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|---------------------------|---------------------|------------|----------------|--------------------|---------|------------------|
| 6273-2SG | i5-3427U | 4GBx1 | 14.0" HD | 720p | 128G SSD | TP 11a/b/g/n | None | Finger | BT | 3 | G P | Pro 64 | 08/12 |

• Part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology | | | | | | | | | | Preloaded operating system ^{20F} Genuine Windows® 7 Professional 64 |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution:</i> 2560x1600 (Mini-DisplayPort or HDMI) @60Hz | | | | | | | | | | |
| Keyboard TrackPoint® | 6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | |
| Touchpad ThinkLight™ | UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | |
| Dimensions ³ | <i>14.0W" (WxDxH):</i> 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm | | | | | | | | | | |
| Weight ² | <i>3-cell:</i> from 4.08 lb (1.85kg) | | | | | | | | | | |
| Case material | <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | | | | | | | | | | |
| Battery - type | Integrated Li-Polymer 3-cell | | | | | | | | | | |
| Battery - life ¹⁰ | <i>3-cell (47Whr):</i> up to 7.1 hr | | | | | | | | | | |
| Chipset | Mobile Intel UM77 Express Chipset | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Smart Card read | None | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| Ports | Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter | | | | | | | | | | |
| PCIe WWAN | None | | | | | | | | | | |
| SIM card | None | | | | | | | | | | |
| Modem | None | | | | | | | | | | |
| IEEE 1394 | None | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

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ThinkPad T430u 6273 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Finger print reader | Blue-tooth | Bat-tery cells | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|---------------------|------------|----------------|--------------------|------------|------------------|
| 6273-23G | i5-3427U | 4+2GB | 14.0" HD | 720p | 500G 7200 | TP 11a/b/g/n | None | Finger | BT | 3 | G P | Win8 Pro64 | 10/12 |
| 6273-24G | i5-3427U | 8GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11a/b/g/n | None | Finger | BT | 3 | G P | Win8 Pro64 | 10/12 |
| 6273-25G | i5-3427U | 8GBx1 | 14.0" HD | 720p | 1T 5400 | TP 11a/b/g/n | None | Finger | BT | 3 | G P | Win8 Pro64 | 10/12 |
| 6273-26G | i5-3427U | 4GBx1 | 14.0" HD | 720p | 500G 7200 | TP 11a/b/g/n | None | Finger | BT | 3 | G P | Win8 Pro64 | 10/12 |
| 6273-3CG | i5-3427U | 4GBx1 | 14.0" HD | 720p | 128G SSD | Intel 2230 | None | Finger | BT | 3 | G P | Win8 Pro64 | 10/12 |
| 6273-3DG | i5-3337U | 2GBx1 | 14.0" HD | 720p | 128G SSD | WLAN upg | None | Finger | No | 3 | G P | Win8 Pro64 | 03/13 |

• Part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--|---|--|
| Positioning Processor | <i>Mainstream Ultrabook™; one spindle</i> Intel® Core™ i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit Preloaded applications⁵ (only some listed) |
| Memory | 8GB max ⁷ (up to 16GB max for certain special configuration models only) / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™ | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage |
| mSATA™ SSD | None | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Widescreen display Camera | 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | Supports ThinkVantage® technologies |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ or Mini DisplayPort supports three independent displays; <i>Maximum external resolution:</i> 2560x1600 (Mini-DisplayPort or HDMI) @60Hz | 65-watt AC adapter ThinkPad Roll Cage (bottom cover) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.39" x 9.29" x 0.83"; 340mm x 236mm x 21mm <i>3-cell:</i> from 4.08 lb (1.85kg) <i>Display cover:</i> Aluminum; <i>Bottom:</i> Glass-Fiber Reinforced Plastic | |
| Battery - type Battery - life ¹⁰ | Integrated Li-Polymer 3-cell <i>3-cell (47Whr):</i> up to 7.1 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel UM77 Express Chipset None None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, external monitor (Mini DisplayPort, HDMI), ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ | Two PCI Express Mini Card slots <i>Some:</i> Wireless LAN upgradable <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + Bluetooth combo adapter | |
| PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT | None None None None <i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Realtek® RTL8111F Gigabit Network Connection None | |
| Audio support Security Security chip Fingerprint reader | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |

See footnotes for more detailed information
WE model(s) withdrawn effective January 2014

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Lenovo® ThinkPad T431s



Lenovo ThinkPad T431s



Lenovo ThinkPad T431s



Lenovo ThinkPad T431s



Lenovo ThinkPad T431s



Lenovo ThinkPad T431s with
ThinkPad Mini Dock Series 3 with USB 3.0 - 90W
433715U

ThinkPad T431s 20AA (TopSeller) - Onsite

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ² rpm | Backlit key-board | M.2 Card WLAN | M.2 Card WWAN/SSD | SIM card | Smart Card Reader | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|-------------------|------------|-------------------|-----------|------------|------------|------------------|
| 20AA000E++ | i7-3687U | 4+4GB | 14.0" HD+ | 240G FDE SSD | Backlit | Intel 6235 ²⁸ | Ericsson | selectable | None | iAMT | vPro | Win7 Pro64 | 03/13 |
| 20AA0012++ | i7-3687U | 4+4GB | 14.0" HD+ | 240G FDE SSD | Backlit | Intel 6235 | Ericsson | selectable | None | iAMT | vPro | Win7 Pro64 | 03/13 |
| 20AA0014++ | i5-3337U | 4GB | 14.0" HD+ | 180G SSD | Backlit | Intel 6235 | Ericsson | selectable | Smart | None | No | Win7 Pro64 | 03/13 |
| 20AA0015++ | i5-3337U | 4GB | 14.0" HD+ | 180G SSD | Backlit | Intel 6235 | Ericsson | selectable | Smart | None | No | Win7 Pro64 | 03/13 |
| 20AA0016++ | i5-3337U | 4GB | 14.0" HD+ | 500G 7200 | Backlit | Intel 6235 | Ericsson | selectable | None | None | No | Win7 Pro64 | 03/13 |
| 20AA0018++ | i5-3337U | 4GB | 14.0" HD+ | 180G SSD | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win7 Pro64 | 03/13 |
| 20AA0019++ | i5-3437U | 4GB | 14.0" HD+ | 180G SSD | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win7 Pro64 | 03/13 |
| 20AA001A++ | i5-3437U | 4GB | 14.0" HD+ | 500G 7200 | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win7 Pro64 | 03/13 |
| 20AA001C++ | i7-3687U | 4+4GB | 14.0" HD+ | 240G FDE SSD | Backlit | Intel 6235 | Ericsson | selectable | None | iAMT | vPro | Win8 Pro64 | 03/13 |
| 20AA001D++ | i7-3687U | 4+4GB | 14.0" HD+ | 240G FDE SSD | Backlit | Intel 6235 | Ericsson | selectable | None | iAMT | vPro | Win8 Pro64 | 03/13 |
| 20AA001F++ | i5-3337U | 4GB | 14.0" HD+ | 180G SSD | Backlit | Intel 6235 | Ericsson | selectable | Smart | None | No | Win8 Pro64 | 03/13 |
| 20AA001G++ | i5-3337U | 4GB | 14.0" HD+ | 180G SSD | Backlit | Intel 6235 | Ericsson | selectable | Smart | None | No | Win8 Pro64 | 03/13 |
| 20AA001H++ | i5-3337U | 4GB | 14.0" HD+ | 500G 7200 | Backlit | Intel 6235 | Ericsson | selectable | None | None | No | Win8 Pro64 | 03/13 |
| 20AA001K++ | i5-3437U | 4GB | 14.0" HD+ | 180G SSD | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win8 Pro64 | 03/13 |
| 20AA001L++ | i5-3437U | 4GB | 14.0" HD+ | 180G SSD | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win8 Pro64 | 03/13 |
| 20AA001M++ | i5-3437U | 4GB | 14.0" HD+ | 500G 7200 | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win8 Pro64 | 03/13 |

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

| | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|
| Positioning | <i>Thin and light enterprise-class Ultrabook™; one spindle</i> | | | | | | | | | | Preloaded operating system^{20F} - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Skype™ • AccuWeather • Amazon Kindle • Intel AppUp® • Nitro Pro • PC Device Stage • Evernote Supports ThinkVantage® technologies 45-watt AC adapter EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Processor | Intel® Core™ i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i5-3437U processor (2 cores, 1.90GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology Intel Core i7-3687U processor (2 cores, 2.10GHz, 4MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | | | | | | | | | | |
| Memory | 12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket | | | | | | | | | | |
| Optical | None | | | | | | | | | | |
| SATA disk | Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ | | | | | | | | | | |
| M.2 SSD | Some: M.2 Solid State Drive (SSD), via M.2 Card slot | | | | | | | | | | |
| Widescreen display | 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | |
| Camera | HD720p resolution, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys, optional LED backlight | | | | | | | | | | |
| UltraNav™ | TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm | | | | | | | | | | |
| Weight ² | 3-cell: from 3.6 lb (1.63kg) | | | | | | | | | | |
| Case color | Graphite Black | | | | | | | | | | |
| Case material | Display cover: Carbon-fiber / Glass-fiber hybrid; Base: Magnesium alloy | | | | | | | | | | |
| Battery - type | Integrated Li-Polymer 3-cell (47Whr), HW Authentication | | | | | | | | | | |
| Battery - life ¹⁰ | MobileMark® 2007: Windows 7: up to 9.0 hr MobileMark 2012: Windows 7: up to 5.9 hr; Windows 8: up to 6.4 hr | | | | | | | | | | |
| Chipset | Mobile Intel QM77 Express Chipset | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Smart Card read | Some: Smart Card reader | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| Ports | Two USB 3.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), Dock connector | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, M.2 Card, Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT combo adapter | | | | | | | | | | |
| PCIe WWAN | Some: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card | | | | | | | | | | |
| SIM card | Some: User selectable, contract required with service provider | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | | | | | | | | | | |
| Intel AMT | Some: Intel Active Management Technology (iAMT) | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad T431s 20AA (TopSeller) - Onsite - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | M.2 Card WLAN | M.2 Card WWAN/SSD | SIM card | Smart Card Reader | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|-------------------|------------|-------------------|-----------|------------|------------|------------------|
| 20AA002A++ | i7-3687U | 4+4GB | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6235 ²⁸ | Ericsson | selectable | None | iAMT | vPro | Win7 Pro64 | 06/13 |
| 20AA002B++ | i5-3437U | 4GB | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win8 Pro64 | 06/13 |
| 20AA002C++ | i5-3437U | 4GB | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win7 Pro64 | 06/13 |
| 20AA002H++ | i5-3337U | 4GB | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6235 | Ericsson | selectable | Smart | None | No | Win8 Pro64 | 06/13 |
| 20AA002J++ | i5-3337U | 4GB | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6235 | Ericsson | selectable | Smart | None | No | Win7 Pro64 | 06/13 |
| 20AA002P++ | i5-3437U | 4GB | 14.0" HD+ | 256G SSD OPAL | None | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win7 Pro64 | 06/13 |
| 20AA002Q++ | i5-3437U | 4GB | 14.0" HD+ | 256G SSD OPAL | None | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win8 Pro64 | 06/13 |
| 20AA002T++ | i5-3437U | 4GB | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win7 Pro64 | 06/13 |
| 20AA002U++ | i5-3437U | 4GB | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6235 | Ericsson | selectable | Smart | iAMT | vPro | Win8 Pro64 | 06/13 |
| 20AA002V++ | i7-3687U | 4+4GB | 14.0" HD+ | 256G SSD OPAL | Backlit | Intel 6235 | Ericsson | selectable | None | iAMT | vPro | Win8 Pro64 | 06/13 |

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

| | | |
|--------------------------------|--|--|
| Positioning | <i>Thin and light enterprise-class Ultrabook™; one spindle</i> | Preloaded operating system^{20F} - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Skype™ • AccuWeather • Amazon Kindle • Intel AppUp® • Nitro Pro • PC Device Stage • Evernote |
| Processor | Intel® Core™ i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i5-3437U processor (2 cores, 1.90GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology Intel Core i7-3687U processor (2 cores, 2.10GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | |
| Memory | 12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket | |
| Optical | None | |
| SATA disk | <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ | |
| M.2 SSD | None | |
| Widescreen display | 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio | |
| Camera | HD720p resolution, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys, optional LED backlight | |
| UltraNav™ | TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch | |
| ThinkLight™ | None | |
| Dimensions ³ | 14.0W" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm | |
| Weight ² | 3-cell: from 3.6 lb (1.63kg) | |
| Case color | Graphite Black | |
| Case material | <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Base:</i> Magnesium alloy | |
| Battery - type | Integrated Li-Polymer 3-cell (47Whr), HW Authentication | |
| Battery - life ¹⁰ | <i>MobileMark® 2007:</i> Windows 7: up to 9.0 hr <i>MobileMark 2012:</i> Windows 7: up to 5.9 hr; Windows 8: up to 6.4 hr | |
| Chipset | Mobile Intel QM77 Express Chipset | |
| ExpressCard | None | |
| Smart Card read | <i>Some:</i> Smart Card reader | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | Two USB 3.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), Dock connector | |
| PCIe WLAN ⁴ | 11a/b/g/n, M.2 Card, Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT combo adapter | |
| PCIe WWAN | Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card | |
| SIM card | User selectable, contract required with service provider | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 | |
| Intel AMT | <i>Some:</i> Intel Active Management Technology (iAMT) | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |
| | Supports ThinkVantage® technologies | |
| | 45-watt AC adapter EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |

See footnotes for more detailed information

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ThinkPad T431s 20AC

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ⁹ rpm | Backlit key-board | M.2 Card WLAN | M.2 Card WWAN/SSD | Finger print reader | Blue-tooth | Bat-tery cells | Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|-------------------|---------------------|------------|----------------|------------|--------------------|------------|------------------|
| 20AC000A++ | i5-3437U | 4GB | 14.0" HD+ | 500G 7200 | Backlit | Intel 6235 ²⁸ | 24GB | Finger | BT | 3 | vPro | G | Win8 Pro64 | 03/13 |

Country Code "++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

| | | |
|---|--|--|
| Positioning Processor | <i>Thin and light enterprise-class Ultrabook™; one spindle</i> Intel® Core™ i5-3437U processor (2 cores, 1.90GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology | Preloaded operating system ^{20F} - Windows 8 Pro 64-bit Preloaded applications ⁵ (only some listed) - Windows 7 models <ul style="list-style-type: none"> • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models <ul style="list-style-type: none"> • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Skype™ • AccuWeather • Amazon Kindle • Intel AppUp® • Nitro Pro • PC Device Stage • Evernote |
| Memory | 12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket | |
| Optical SATA disk | None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ | |
| M.2 SSD | M.2 Solid State Drive (SSD), via M.2 Card slot | |
| Widescreen display Camera | 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio HD720p resolution, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard UltraNav™ ThinkLight™ | 6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch None | |
| Dimensions ³ Weight ² Case color Case material | 14.0W" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm <i>3-cell:</i> from 3.6 lb (1.63kg) Graphite Black <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Base:</i> Magnesium alloy | |
| Battery - type Battery - life ¹⁰ | Integrated Li-Polymer 3-cell (47Whr), HW Authentication <i>MobileMark® 2007:</i> Windows 7: up to 9.0 hr <i>MobileMark 2012:</i> Windows 7: up to 5.9 hr; Windows 8: up to 6.4 hr | |
| Chipset ExpressCard Smart Card read Multicard reader Ports | Mobile Intel QM77 Express Chipset None None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), Dock connector | |
| PCIe WLAN ⁴ PCIe WWAN SIM card Bluetooth™ Ethernet Intel AMT Audio support | 11a/b/g/n, M.2 Card, Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT combo adapter None None Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel 82579LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on the keyboard bezel, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |
| | Supports ThinkVantage® technologies | |
| | 45-watt AC adapter EPEAT™ Silver rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |

See footnotes for more detailed information

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Lenovo® ThinkPad T530



Lenovo ThinkPad T530



Lenovo ThinkPad T530



Lenovo ThinkPad T530



Lenovo ThinkPad T530



Lenovo ThinkPad T530

ThinkPad T530 2392 (TopSeller)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Finger print reader | Bat- tery Intel vPro | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|----------|---------------------|----------------------|-------------------|
| 2392-38G | i5-3210M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 6205 ²⁸ | WWAN upg | None | Finger | BT 6 | None Pro 64 06/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, dual-channel capable, two 204-pin SO-DIMM sockets DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.39 lb (2.45kg); <i>9-cell:</i> starting at 5.76 lb (2.62kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.1 hr; <i>9-cell (94Whr):</i> up to 15.3 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 30.6 hr | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad T530 2392 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ^o rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | Smart Card Reader | Finger print reader | Battery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|-------------------|---------------------|---------------|-----------|------------|------------|------------------|
| 2392-AWG | i5-3320M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 ²⁸ | WWAN upg | Smart | Finger | 6 | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2392-AUG | i5-3210M | 4GBx1 | 15.6" HD | 500G 7200 | None | Intel 6205 | WWAN upg | Smart | Finger | 6 | None | None | Win7 Pro64 | 10/12 |
| 2392-EKG | i3-3120M | 4GBx1 | 15.6" HD+ | 180G SSD | Backlit | Intel 6205 | WWAN upg | None | None | 6 | None | None | Win8 Pro64 | 06/13 |
| 2392-EJG | i3-3120M | 4GBx1 | 15.6" HD+ | 180G SSD | Backlit | Intel 6205 | WWAN upg | None | None | 6 | None | None | Win7 Pro64 | 06/13 |
| 2392-EHG | i3-3120M | 4GBx1 | 15.6" HD | 500G 7200 | Backlit | Intel 2200 | WWAN upg | None | None | 6 | None | None | Win8 Pro64 | 06/13 |
| 2392-EGG | i3-3120M | 4GBx1 | 15.6" HD | 500G 7200 | Backlit | Intel 2200 | WWAN upg | None | None | 6 | None | None | Win7 Pro64 | 06/13 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology Intel Core i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.39 lb (2.45kg); <i>9-cell:</i> starting at 5.76 lb (2.62kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.1 hr; <i>9-cell (94Whr):</i> up to 15.3 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 30.6 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

ThinkPad T530 2392 (Optimus) - TopSeller

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Finger-print reader | Bat-tery Intel vPro | Ann Date | | |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|------------|---------------------|---------------------|----------|--------|-------|
| 2392-37G | i5-3210M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | Backlit | Intel 6205 ²⁸ | Ericsson | selectable | Finger | 6 | None | Pro 64 | 06/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | |
|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000. DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync |
| mSATA™ SSD | None | • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W"</i> (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.73 lb (2.60kg); <i>9-cell:</i> starting at 6.10 lb (2.77kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 25.6 hr | |
| Chipset ExpressCard Smart Card Reader Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | User selectable, contract required with service provider None IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

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(G-KN4-2) August 2013

ThinkPad T530 2392 (Optimus) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ⁹ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | Smart Card Reader | Finger print reader | Battery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|-------------------|---------------------|---------------|-----------|------------|------------|------------------|
| 2392-AYG | i7-3520M | 4GBx2 | 15.6" FHD | 500G 7200 | None | Intel 6205 ²⁸ | WWAN upg | Smart | Finger | 9 | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2392-AXG | i7-3520M | 4GBx2 | 15.6" HD+ | 1T 5400 | None | Intel 6205 | WWAN upg | Smart | Finger | 9 | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2392-AVG | i5-3320M | 4GBx1 | 15.6" HD | 500G 7200 | None | Intel 6300 ²⁸ | WWAN upg | Smart | Finger | 6 | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2392-ATG | i5-3210M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | None | None | Win7 Pro64 | 10/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | |
|--|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| mSATA™ SSD | None | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.73 lb (2.60kg); <i>9-cell:</i> starting at 6.10 lb (2.77kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 25.6 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 Wireless WAN upgradable None None IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T530 2394

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN / mSATA | Smart Card Reader | Finger print reader | Blue-tooth | Battery cells | Intel AMT | Global (G) Intel vPro | GMP (P) Preload (mm/yy) | Ann Date | |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|-----------------------------|-------------------|---------------------|------------|---------------|-----------|-----------------------|-------------------------|----------|-------|
| 2394-5UG | i5-3320M | 4GBx1 | 15.6" HD+ | 720p | 180G SSD | None | Intel 6205 ²⁸ | upg | None | Finger | BT | 6 | iAMT | vPro | G | Pro 64 | 06/12 |
| 2394-5VG | i5-3320M | 4GBx1 | 15.6" HD+ | 720p | 128G SSD | None | Intel 6205 | upg | None | Finger | BT | 6 | iAMT | vPro | G | Pro 64 | 06/12 |
| 2394-5YG | i7-3520M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | None | Intel 6205 | upg | None | Finger | BT | 6 | iAMT | vPro | G | Pro 64 | 06/12 |
| 2394-62G | i5-3320M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | None | Intel 6205 | upg | None | Finger | BT | 6 | iAMT | vPro | G | Pro 64 | 06/12 |
| 2394-63G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | None | Intel 6205 | upg | None | Finger | BT | 6 | iAMT | vPro | G | Pro 64 | 06/12 |
| 2394-64G | i5-3320M | 4GBx1 | 15.6" HD | None | 320G 7200 | None | Intel 6205 | upg | Smart | None | No | 9 | iAMT | vPro | G | Pro 64 | 06/12 |
| 2394-23G | i7-3520M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | None | Intel 6205 | upg | None | Finger | BT | 6 | iAMT | vPro | G | Pro 64 | 06/12 |
| 2394-22G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | None | Intel 6205 | upg | None | Finger | BT | 6 | iAMT | vPro | G | Pro 64 | 06/12 |
| 2394-70G | i5-3320M | 4GBx1 | 15.6" HD+ | 720p | 320G 7200 | None | Intel 6205 | upg | Smart | Finger | BT | 6 | iAMT | vPro | G | Pro 64 | 07/12 |
| 2394-7DG | i5-2520M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | None | Intel 6205 | upg | None | Finger | BT | 6 | None | No | | Pro 64 | 10/12 |
| 2394-7HG | i5-2520M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | None | Intel 6205 | upg | None | Finger | BT | 6 | None | No | | Pro 64 | 10/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|---|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.39 lb (2.45kg); <i>9-cell:</i> starting at 5.76 lb (2.62kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.1 hr; <i>9-cell (94Whr):</i> up to 15.3 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 30.6 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None <i>Some:</i> Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

ThinkPad T530 2394 (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | Finger print reader | Blue-tooth cells | Bat-tery vPro | Global (G) Intel GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|---------------------|------------------|---------------|--------------------------|--------------|------------------|
| 2394-42G | i7-3520M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | None | Intel 6205 ²⁸ | WWAN upg | Finger | BT | 6 | vPro | G Win8 Pro64 | 10/12 |
| 2394-43G | i5-3320M | 4GBx1 | 15.6" HD+ | 720p | 180G SSD | None | Intel 6205 | WWAN upg | Finger | BT | 6 | vPro | G Win8 Pro64 | 10/12 |
| 2394-44G | i5-3320M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | None | Intel 6205 | WWAN upg | Finger | BT | 6 | vPro | G Win8 Pro64 | 10/12 |
| 2394-45G | i5-3320M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | None | Intel 6205 | WWAN upg | Finger | BT | 6 | vPro | G Win8 Pro64 | 10/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit Preloaded applications⁵ (only some listed) |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| mSATA™ SSD | None | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.39 lb (2.45kg); <i>9-cell:</i> starting at 5.76 lb (2.62kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.1 hr; <i>9-cell (94Whr):</i> up to 15.3 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 30.6 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

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ThinkPad T530 2394 (Optimus)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Smart Card Reader | Finger print reader | Bat-tery cells | Intel AMT | Intel vPro | Global (G) GMP (P)Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|------------|-------------------|---------------------|----------------|-----------|------------|---------------------------|------------------|
| 2394-5RG | i7-3520M | 4GBx1 | 15.6" FHD | 180G SSD | None | Intel 6205 ²⁸ | WWAN upg | None | None | Finger | 9 | iAMT | vPro | G Pro 64 | 06/12 |
| 2394-5TG | i7-3520M | 4GBx1 | 15.6" HD+ | 180G SSD | None | Intel 6205 | WWAN upg | None | None | Finger | 9 | iAMT | vPro | G Pro 64 | 06/12 |
| 2394-5WG | i7-3520M | 4GBx1 | 15.6" FHD | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | Finger | 9 | iAMT | vPro | G Pro 64 | 06/12 |
| 2394-5XG | i7-3520M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | Finger | 9 | iAMT | vPro | G Pro 64 | 06/12 |
| 2394-5ZG | i5-3320M | 4GBx1 | 15.6" FHD | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | Finger | 9 | iAMT | vPro | G Pro 64 | 06/12 |
| 2394-61G | i5-3320M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | Finger | 9 | iAMT | vPro | G Pro 64 | 06/12 |
| 2394-65G | i5-3320M | 4GBx1 | 15.6" HD+ | 320G 7200 | None | Intel 6205 | WWAN upg | None | None | Finger | 9 | iAMT | vPro | G Pro 64 | 06/12 |
| 2394-7GG | i5-2520M | 4GBx1 | 15.6" FHD | 180G SSD | Backlit | Intel 6300 ²⁸ | Ericsson | selectable | Smart | Finger | 9 | None | No | Pro 64 | 10/12 |
| 2394-7FG | i5-2520M | 4GBx1 | 15.6" FHD | 128G SSD | None | Intel 6205 | WWAN upg | None | None | Finger | 9 | None | No | Pro 64 | 10/12 |
| 2394-7EG | i5-2520M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Smart | Finger | 9 | None | No | Pro 64 | 10/12 |

| | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000. DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000. DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000. DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | | Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | | Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | | Preloaded applications ¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 or 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.73 lb (2.60kg); <i>9-cell:</i> starting at 6.10 lb (2.77kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 25.6 hr | | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | |
| SIM card Modem | <i>Some:</i> User selectable, contract required with service provider None | | | | | | | | | | | |
| IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad T530 2394 (Optimus) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | Finger print reader | Battery cells | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|---------------------|---------------|---------------------------|------------------|
| 2394-41G | i7-3520M | 4GBx1 | 15.6" HD+ | 720p | 500G 7200 | None | Intel 6205 ²⁸ | WWAN upg | Finger | 9 | vPro G | Win8 Pro64 10/12 |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000. DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Preloaded applications⁵ (only some listed) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | | | | | | | | | | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>15.6W"</i> (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.73 lb (2.60kg); <i>9-cell:</i> starting at 6.10 lb (2.77kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 25.6 hr | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None | | | | | | | | | | |
| IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad T530 2429 (Onsite)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit keyboard | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Smart Card Reader | Battery cells | Power Adapter (watt) | Intel AMT | Intel vPro | Global (G) GMP (P) | Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|-------------------------------|------------------|--------------------------|----------------------------|------------|-------------------|---------------|----------------------|-----------|------------|--------------------|-----------------|----------|
| 2429-2WG | i7-3520M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | Intel 6205 ²⁸ | Ericsson | selectable | None | 6 | 90W | iAMT | vPro | | Pro 64 | 06/12 |
| 2429-5UG | i5-3320M | 4GBx1 | 15.6" HD+ | 180G SSD | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | iAMT | vPro | G P | Pro 64 | 06/12 |
| 2429-5VG | i5-3320M | 4GBx1 | 15.6" HD+ | 128G SSD | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | iAMT | vPro | G P | Pro 64 | 06/12 |
| 2429-5YG | i7-3520M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | iAMT | vPro | G P | Pro 64 | 06/12 |
| 2429-62G | i5-3320M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | iAMT | vPro | G P | Pro 64 | 06/12 |
| 2429-64G | i5-3320M | 4GBx1 | 15.6" HD+ | 320G 7200 | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | iAMT | vPro | G P | Pro 64 | 06/12 |
| 2429-2DG | i5-3320M | 4GBx1 | 15.6" HD+ | 320G 7200 | None | Intel 6205 | Ericsson | selectable | Smart | 6 | 90W | iAMT | vPro | | Pro 64 | 06/12 |
| 2429-23G | i7-3520M | 4GBx1 | 15.6" HD | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | iAMT | vPro | G P | Pro 64 | 06/12 |
| 2429-22G | i5-3320M | 4GBx1 | 15.6" HD | 320G 7200 | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | iAMT | vPro | G P | Pro 64 | 06/12 |
| 2429-70G | i5-3320M | 4GBx1 | 15.6" HD+ | 320G 7200 | None | Intel 6205 | WWAN upg | None | Smart | 6 | 65W | iAMT | vPro | G P | Pro 64 | 07/12 |
| 2429-74G | i5-2520M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | None | No | | Pro 64 | 10/12 |
| 2429-73G | i5-2520M | 4GBx1 | 15.6" HD | 320G 7200 | None | Intel 6205 | WWAN upg | None | None | 6 | 65W | None | No | | Pro 64 | 10/12 |

| | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | 15.6W" (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm 6-cell: starting at 5.39 lb (2.45kg); 9-cell: starting at 5.76 lb (2.62kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication 6-cell (57Whr): up to 9.1 hr; 9-cell (94Whr): up to 15.3 hr; 9-cell plus 9-cell Slice battery (94Whr): up to 30.6 hr | | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | 65-watt or 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad T530 2429 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Finger print reader | Bat-tery cells | Intel AMT | Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|----------|---------------------|----------------|-----------|------------|--------------------|------------|------------------|
| 2429-6MG | i5-3210M | 4GBx1 | 15.6" HD | 500G 7200 | Backlit | Intel 6205 ²⁸ | WWAN upg | None | Finger | 6 | None | No | Win7 Pro64 | 10/12 | |
| 2429-6KG | i7-3520M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | Intel 6205 | Ericsson selectable | Finger | 6 | iAMT | vPro | Win7 Pro64 | 10/12 | | |
| 2429-42G | i7-3520M | 4GBx1 | 15.6" HD | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 2429-43G | i5-3320M | 4GBx1 | 15.6" HD+ | 180G SSD | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 2429-44G | i5-3320M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 2429-45G | i5-3320M | 4GBx1 | 15.6" HD | 320G 7200 | None | Intel 6205 | WWAN upg | None | Finger | 6 | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 2429-6DG | i5-3210M | 4GBx1 | 15.6" HD | 500G 7200 | Backlit | Intel 6205 | WWAN upg | None | Finger | 6 | None | No | Win8 Pro64 | 10/12 | |
| 2429-6BG | i7-3520M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | Intel 6205 | Ericsson selectable | Finger | 6 | iAMT | vPro | Win8 Pro64 | 10/12 | | |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--------------------------------|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Optical | DVD burner, 12.7mm Ultrabay Enhanced, removable | |
| Ultrabay | One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access | |
| SATA disk | <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | |
| Touchpad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm | |
| Weight ² | <i>6-cell:</i> starting at 5.39 lb (2.45kg); <i>9-cell:</i> starting at 5.76 lb (2.62kg) | |
| Case material | <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication | |
| Battery - life ¹⁰ | <i>6-cell (57Whr):</i> up to 9.1 hr; <i>9-cell (94Whr):</i> up to 15.3 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 30.6 hr | |
| Chipset | Mobile Intel QM77 Express Chipset | |
| ExpressCard | One slot (ExpressCard/34) | |
| Smart Card Read | None | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | |
| PCIe WWAN | <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | |
| Modem | None | |
| IEEE 1394 | None | |
| Bluetooth™ | Bluetooth 4.0 wireless | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | |
| Intel AMT | <i>Some:</i> Intel Active Management Technology (iAMT) | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T530 2429 (Onsite) - Windows 8 - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | Finger print reader | Blue-tooth | Bat-tery cells | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|---------------------|------------|----------------|------------|------------|------------------|
| 2429-86G | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 240G FDE SSD | Backlit | Intel 6205 ²⁸ | WWAN upg | Finger | BT | 6 | No | Win8 Pro64 | 03/13 |
| 2429-85G | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 240G FDE SSD | Backlit | Intel 6205 | WWAN upg | Finger | BT | 6 | No | Win7 Pro64 | 03/13 |
| 2429-84G | i5-3230M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 6205 | WWAN upg | Finger | BT | 6 | No | Win8 Pro64 | 03/13 |
| 2429-7TG | i5-3230M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 6205 | WWAN upg | Finger | BT | 6 | No | Win7 Pro64 | 03/13 |
| 2429-8EG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 240G FDE SSD | Backlit | Intel 6205 | WWAN upg | None | BT | 6 | No | Win8 Pro64 | 06/13 |
| 2429-8DG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 240G FDE SSD | Backlit | Intel 6205 | WWAN upg | None | BT | 6 | No | Win7 Pro64 | 06/13 |
| 2429-8CG | i5-3230M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 6205 | WWAN upg | None | BT | 6 | No | Win8 Pro64 | 06/13 |
| 2429-8BG | i5-3230M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 6205 | WWAN upg | None | BT | 6 | No | Win7 Pro64 | 06/13 |
| 2429-8JG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | WWAN upg | None | BT | 6 | No | Win8 Pro64 | 06/13 |
| 2429-8HG | i5-3230M | 4GBx1 | 15.6" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | WWAN upg | None | BT | 6 | No | Win7 Pro64 | 06/13 |

| | | |
|--|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.39 lb (2.45kg); <i>9-cell:</i> starting at 5.76 lb (2.62kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.1 hr; <i>9-cell (94Whr):</i> up to 15.3 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 30.6 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |
| | Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |

See footnotes for more detailed information

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ThinkPad T530 2429 (Optimus) - Onsite

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ⁵ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Battery cells | Power Adapter (watt) | Intel AMT | Global (G) vPro (P) | Ann Date (mm/yy) |
|--|--|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|------------|---------------|----------------------|-----------|---------------------|------------------|
| 2429-2VG | i7-3610QM | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | Intel 6205 ²⁸ | Ericsson | selectable | 9 | 135W | None | No | Pro 64 06/12 |
| 2429-2UG | i7-3610QM | 4GBx1 | 15.6" FHD | 180G SSD | Backlit | Intel 6205 | Ericsson | selectable | 9 | 135W | None | No | Pro 64 06/12 |
| 2429-5RG | i7-3520M | 4GBx1 | 15.6" FHD | 180G SSD | None | Intel 6205 | WWAN upg | None | 9 | 90W | iAMT | vPro G P | Pro 64 06/12 |
| 2429-5TG | i7-3520M | 4GBx1 | 15.6" HD+ | 180G SSD | None | Intel 6205 | WWAN upg | None | 9 | 90W | iAMT | vPro G P | Pro 64 06/12 |
| 2429-5WG | i7-3520M | 4GBx1 | 15.6" FHD | 500G 7200 | None | Intel 6205 | WWAN upg | None | 9 | 90W | iAMT | vPro G P | Pro 64 06/12 |
| 2429-5XG | i7-3520M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | 9 | 90W | iAMT | vPro G P | Pro 64 06/12 |
| 2429-5ZG | i5-3320M | 4GBx1 | 15.6" FHD | 500G 7200 | None | Intel 6205 | WWAN upg | None | 9 | 90W | iAMT | vPro G P | Pro 64 06/12 |
| 2429-61G | i5-3320M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | Intel 6205 | WWAN upg | None | 9 | 90W | iAMT | vPro G P | Pro 64 06/12 |
| 2429-63G | i5-3320M | 4GBx1 | 15.6" HD+ | 320G 7200 | None | Intel 6205 | WWAN upg | None | 9 | 90W | iAMT | vPro G P | Pro 64 06/12 |
| 2429-65G | i5-3320M | 4GBx1 | 15.6" HD | 320G 7200 | None | Intel 6205 | WWAN upg | None | 9 | 90W | iAMT | vPro G P | Pro 64 06/12 |
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology Intel Core i7-3610QM processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | | | | | | | | | | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | | | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.73 lb (2.60kg); <i>9-cell:</i> starting at 6.10 lb (2.77kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 25.6 hr | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card Reader Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | |
| Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | | | | | | | | | | | |
| Supports ThinkVantage® technologies 90-watt or 135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad T530 2429 (Optimus) - Onsite - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Smart Card Reader | Finger print reader | Bat-tery cells | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|----------------------------|------------|-------------------|---------------------|----------------|------------|---------|------------------|
| 2429-77G | i5-2520M | 4GBx1 | 15.6" FHD | 180G SSD | Backlit | Intel 6300 ²⁸ | Ericsson | selectable | Smart | Finger | 9 | None | Pro 64 | 10/12 |
| 2429-76G | i5-2520M | 4GBx1 | 15.6" FHD | 128G SSD | None | Intel 6205 ²⁸ | WWAN upg | None | None | Finger | 9 | None | Pro 64 | 10/12 |
| 2429-75G | i5-2520M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | Intel 6205 | Ericsson | selectable | Smart | Finger | 9 | None | Pro 64 | 10/12 |

| | | |
|---|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications ¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | 15.6W" (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.73 lb (2.60kg); <i>9-cell:</i> starting at 6.10 lb (2.77kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 25.6 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |
| Supports ThinkVantage® technologies | | |
| 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | |

See footnotes for more detailed information

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ThinkPad T530 2429 (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ³ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | Mini Card SIM card | Smart Card Reader | Bat-tery Adapter | Power (watt) | Intel AMT | Global (G) Intel vPro (P) | GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|------------------|--------------|-----------|---------------------------|------------|---------|------------------|
| 2429-6LG | i5-3210M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | 6205 ²⁸ | Ericsson | selectable | Smart | 6 | 90W | No | No | Win7 Pro64 | 10/12 | |
| 2429-6JG | i7-3630QM | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | 6205 | Ericsson | selectable | None | 9 | 135W | No | No | Win7 Pro64 | 10/12 | |
| 2429-6HG | i7-3630QM | 4GBx2 | 15.6" FHD | 180G SSD | Backlit | 6205 | Ericsson | selectable | None | 9 | 135W | No | No | Win7 Pro64 | 10/12 | |
| 2429-41G | i7-3520M | 4GBx1 | 15.6" HD+ | 500G 7200 | None | 6205 | upg | None | None | 9 | 90W | iAMT | vPro G P | Win8 Pro64 | 10/12 | |
| 2429-6FG | i7-3630QM | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | 6205 | Ericsson | selectable | None | 9 | 135W | No | No | Win8 Pro64 | 10/12 | |
| 2429-6EG | i7-3630QM | 4GBx2 | 15.6" FHD | 180G SSD | Backlit | 6205 | Ericsson | selectable | None | 9 | 135W | No | No | Win8 Pro64 | 10/12 | |
| 2429-6CG | i5-3210M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | 6205 | Ericsson | selectable | Smart | 6 | 90W | No | No | Win8 Pro64 | 10/12 | |
| 2429-8GG | i7-3630QM | 8GBx1 | 15.6" FHD | 256G SSD OPAL | Backlit | 6205 | Ericsson | selectable | None | 9 | 135W | No | No | Win8 Pro64 | 06/13 | |
| 2429-8FG | i7-3630QM | 8GBx1 | 15.6" FHD | 256G SSD OPAL | Backlit | 6205 | Ericsson | selectable | None | 9 | 135W | No | No | Win7 Pro64 | 06/13 | |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology Intel Core i7-3630QM processor (4 cores, 2.40GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.40GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.73 lb (2.60kg); <i>9-cell:</i> starting at 6.10 lb (2.77kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 25.6 hr | |
| Chipset ExpressCard Smart Card Reader Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | Supports ThinkVantage® technologies 90-watt or 135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

ThinkPad T530 2429 (Optimus) - Onsite (Windows 8) - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ² rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | Mini Card SIM card | Smart Card Reader | Finger print reader | Bat-tery cells | Power Adapter (watt) | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|---------------------|----------------------------|--------------------|-------------------|---------------------|----------------|----------------------|------------|------------|------------------|
| 2429-82G | i5-3230M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | 6205 ²⁸ | Ericsson | selectable | Smart | Finger | 6 | 90W | No | Win8 Pro64 | 03/13 |
| 2429-7ZG | i5-3230M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | 6205 | Ericsson | selectable | Smart | Finger | 6 | 90W | No | Win7 Pro64 | 03/13 |
| 2429-7YG | i7-3630QM | 8GBx1 | 15.6" FHD | 240G FDE SSD | Backlit | 6205 | Ericsson | selectable | None | Finger | 9 | 135W | No | Win8 Pro64 | 03/13 |
| 2429-7XG | i7-3630QM | 8GBx1 | 15.6" FHD | 240G FDE SSD | Backlit | 6205 | Ericsson | selectable | None | Finger | 9 | 135W | No | Win7 Pro64 | 03/13 |
| 2429-8AG | i5-3230M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | 6205 | Ericsson | selectable | Smart | None | 6 | 90W | No | Win8 Pro64 | 06/13 |
| 2429-89G | i5-3230M | 4GBx1 | 15.6" HD+ | 500G 7200 | Backlit | 6205 | Ericsson | selectable | Smart | None | 6 | 90W | No | Win7 Pro64 | 06/13 |

| | | |
|--|--|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3630QM processor (4 cores, 2.40GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.40GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA NVS™ 5400M , PCI Express® x16, 1GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.73 lb (2.60kg); <i>9-cell:</i> starting at 6.10 lb (2.77kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 25.6 hr | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem | User selectable, contract required with service provider None | |
| IEEE 1394 Bluetooth™ Ethernet Intel AMT | IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | 90-watt or 135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad T530i 2392 (TopSeller)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁸ rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Finger print reader | Bat-tery Intel vPro | Preload | Ann Date (mm/yy) | | |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|---------------------|----------------------------|----------|---------------------|---------------------|---------|------------------|--------|-------|
| 2392-39G | i3-2370M | 4GBx1 | 15.6" HD | 720p | 320G 7200 | Backlit | Intel 2200 | WWAN upg | None | Finger | BT | 6 | None | Pro 64 | 06/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i3-2370M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync | | |
| mSATA™ SSD | None | | | | | | | | | | • Lenovo SimpleTap | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>15.6W"</i> (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.39 lb (2.45kg); <i>9-cell:</i> starting at 5.76 lb (2.62kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.1 hr; <i>9-cell (94Whr):</i> up to 15.3 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 30.6 hr | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad T530i 2392 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ² rpm | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | Finger print reader | Bat- tery Blue- tooth cells | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|----------------------------|---------------------|-----------------------------|------------|------------|------------------|
| 2392-AHG | i3-3110M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | BT 6 | None | Win7 Pro64 | 10/12 |
| 2392-5WG | i3-3110M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | BT 6 | None | Win8 Pro64 | 10/12 |
| 2392-CMG | i3-3120M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | BT 6 | None | Win8 Pro64 | 02/13 |
| 2392-E6G | i3-3120M | 4GBx1 | 15.6" HD+ | 720p | 180G SSD | Backlit | Intel 6205 ²⁸ | WWAN upg | Finger | BT 6 | None | Win8 Pro64 | 03/13 |
| 2392-E5G | i3-3120M | 4GBx1 | 15.6" HD+ | 720p | 180G SSD | Backlit | Intel 6205 | WWAN upg | Finger | BT 6 | None | Win7 Pro64 | 03/13 |
| 2392-E4G | i3-3120M | 4GBx1 | 15.6" HD | 720p | 500G 7200 | Backlit | Intel 2200 | WWAN upg | Finger | BT 6 | None | Win7 Pro64 | 03/13 |
| 2392-ENG | i3-3120M | 4GBx1 | 15.6" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | WWAN upg | None | BT 6 | None | Win8 Pro64 | 06/13 |
| 2392-EMG | i3-3120M | 4GBx1 | 15.6" HD+ | 720p | 256G SSD OPAL | Backlit | Intel 6205 | WWAN upg | None | BT 6 | None | Win7 Pro64 | 06/13 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | |
|---|---|---|
| Positioning Processor | <i>Premiere performance; two spindles</i> Intel® Core™ i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology | Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | Preloaded applications⁵ (only some listed) |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| mSATA™ SSD | None | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • FingerPrint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | Supports ThinkVantage® technologies |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.39 lb (2.45kg); <i>9-cell:</i> starting at 5.76 lb (2.62kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 9.1 hr; <i>9-cell (94Whr):</i> up to 15.3 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 30.6 hr | |
| Chipset ExpressCard Smart Card Reader Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 Wireless WAN upgradable None None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None HD Audio, Realtek® ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security Security chip FingerPrint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available | | |

See footnotes for more detailed information

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Lenovo® ThinkPad W530



Lenovo ThinkPad W530



Lenovo ThinkPad W530



Lenovo ThinkPad W530



Lenovo ThinkPad W530 with four displays



Lenovo ThinkPad W530

ThinkPad W530 2438 (Optimus) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB ³ rpm | RAID | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Color calib | Battery cells | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------|-------------------------------|------|-------------------|--------------------------|----------------------------|-------------|---------------|------------|------------|------------------|
| 2438-4GG | i7-3720QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | None | Intel 6205 ²⁸ | WWAN upg | None | 6 | vPro | Win7 Pro64 | 10/12 |
| 2438-4FG | i7-3820QM | 4GBx1 | 15.6" FHD | K1000M | 1x500G 7200 | No | None | Intel 6205 | WWAN upg | None | 6 | vPro | Win7 Pro64 | 10/12 |
| 2438-4EG | i7-3720QM | 4GBx1 | 15.6" HD | K1000M | 1x320G 7200 | No | None | Intel 6205 | WWAN upg | None | 6 | vPro | Win7 Pro64 | 10/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**
- **Power-packed engineering with Open GL graphics and ISV certifications**

| | | |
|--------------------------------|---|---|
| Positioning Processor | <i>Mobile workstation; two spindles</i> Intel® Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology Intel Core i7-3820QM processor (4 cores, 2.70GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology | Preloaded operating system²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Memory | <i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets <i>All:</i> PC3-12800 1600MHz DDR3, non-parity, dual-channel capable | |
| Optical | DVD burner, 12.7mm Ultrabay Enhanced, removable | |
| Ultrabay | One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access | |
| SATA disk | <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Color calibration | None | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M , PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | |
| Touchpad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm | |
| Weight ² | <i>6-cell:</i> starting at 5.76 lb (2.62kg); <i>9-cell:</i> starting at 6.19 lb (2.81kg) | |
| Case material | <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication | |
| Battery - life ¹⁰ | <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 25.6 hr | |
| Chipset | Mobile Intel QM77 Express Chipset | |
| ExpressCard | One slot (ExpressCard/34) | |
| Smart Card Read | None | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | |
| PCIe WWAN | Wireless WAN upgradable | |
| SIM card | None | |
| Modem | None | |
| Bluetooth™ | Bluetooth 4.0 wireless | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | |
| Intel AMT | Intel Active Management Technology (iAMT) | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

See footnotes for more detailed information

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ThinkPad W530 2441 (Optimus)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB ³ rpm | RAID | SATA optical | Backlit key-board | PCIe Mini Card WLAN | PCIe Card mSATA | PCIe Mini Card WWAN | Finger print reader | Bat-tery cells | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------|-------------------------------|------|--------------|-------------------|--------------------------|-----------------|---------------------|---------------------|----------------|---------------------------|------------------|
| 2441-3TG | i7-3720QM | 4GBx1 | 15.6" FHD | K1000M | 2x500G 7200 | 1 | None | None | Intel 6205 ²⁸ | upg | Finger | 9 | vPro | G | Pro 64 06/12 |
| 2441-3SG | i7-3720QM | 4GBx1 | 15.6" FHD | K1000M | 2x500G 7200 | 0 | None | None | Intel 6205 | upg | Finger | 9 | vPro | G | Pro 64 06/12 |
| 2441-23G | i7-3820QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | DVD±RW | None | Intel 6205 | upg | Finger | 9 | vPro | G | Pro 64 06/12 |
| 2441-22G | i7-3720QM | 4GBx1 | 15.6" HD+ | K1000M | 1x320G 7200 | No | DVD±RW | None | Intel 6205 | upg | Finger | 9 | vPro | G | Pro 64 06/12 |
| 2441-5RG | i7-3740QM | 4GBx1 | 15.6" HD+ | K1000M | 1x320G 7200 | No | DVD±RW | None | Intel 6205 | upg | Finger | 9 | vPro | G | Pro 64 02/13 |
| 2441-5QG | i7-3840QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | DVD±RW | None | Intel 6205 | upg | Finger | 9 | vPro | G | Pro 64 02/13 |

- A depot repair service 3-year limited warranty
- Power-packed engineering with Open GL graphics and ISV certifications

| | | |
|--|--|--|
| Positioning Processor | <p><i>Mobile workstation; two spindles</i></p> <p>Intel® Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology</p> <p>Intel Core i7-3740QM processor (4 cores, 2.70GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology</p> <p>Intel Core i7-3820QM processor (4 cores, 2.70GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology</p> <p>Intel Core i7-3840QM processor (4 cores, 2.80GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.80GHz), HT technology</p> | <p>Preloaded operating system²⁰ Genuine Windows® 7 Professional 64</p> <p>Ready to install applications¹⁴ (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager <p>Preloaded applications¹⁴ (only some listed)</p> <ul style="list-style-type: none"> • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) • X-Rite® Pantone® Color Calibrator (color calibration models) |
| Memory | <p><i>dual-core model:</i> 16GB max⁷, two 204-pin SO-DIMM sockets</p> <p><i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets</p> <p><i>All:</i> PC3-12800 1600MHz DDR3, non-parity, dual-channel capable</p> | |
| Optical Ultrabay SATA disk | <p><i>Some:</i> DVD burner, 12.7mm Ultrabay Enhanced, removable</p> <p>One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access</p> <p><i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high</p> <p><i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™</p> <p><i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive</p> | |
| mSATA™ SSD | None | |
| Widescreen display | <p><i>Some:</i> 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut</p> <p><i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut</p> | |
| Color calibration Camera | None | |
| Graphics | <p>NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M, PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays;</p> <p><i>Maximum external resolution:</i> 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA)</p> | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | <p>6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight</p> <p>TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass</p> <p>UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch</p> <p>Illuminates the keyboard to improve visibility in low-light conditions</p> | |
| Dimensions ³ Weight ² Case material | <p>15.6W" (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm</p> <p>6-cell: starting at 5.76 lb (2.62kg); 9-cell: starting at 6.19 lb (2.81kg)</p> <p><i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid;</p> <p><i>Bottom:</i> Glass-fiber reinforced plastic without paint</p> | |
| Battery - type Battery - life ¹⁰ | <p>Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication</p> <p>6-cell (57Whr): up to 7.7 hr; 9-cell (94Whr): up to 12.8 hr;</p> <p>9-cell plus 9-cell Slice battery (94Whr): up to 25.6 hr</p> | |
| Chipset ExpressCard Smart Card Reader Multicard Reader Ports | <p>Mobile Intel QM77 Express Chipset</p> <p>One slot (ExpressCard/34)</p> <p>None</p> <p>4-in-1 reader (MMC, SD, SDHC, SDXC)</p> <p>Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)</p> | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <p>Two PCI Express Mini Card slots</p> <p>11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2</p> <p>Wireless WAN upgradable</p> <p>None</p> <p>None</p> <p>Bluetooth 4.0 wireless</p> <p>Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1</p> <p>Intel Active Management Technology (iAMT)</p> <p>HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack</p> | |
| Security Security chip Fingerprint reader | <p>Power-on password, hard disk password, supervisor password, security keyhole</p> <p>Trusted Platform Module, TCG 1.2-compliant</p> <p>AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip</p> | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | <p>Supports ThinkVantage® technologies</p> <p>170-watt AC adapter</p> <p>ThinkPad Roll Cage (one-piece magnesium frame)</p> <p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.0-compliant</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p> <p>International Warranty Service¹⁷</p> <p>24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p> |

See footnotes for more detailed information

ThinkPad W530 2441 (Optimus) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB ^a rpm | RAID | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Finger-print reader | Bat-tery cells | Global (G) Intel GMP (P) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------|-------------------------------|------|-------------------|--------------------------|----------------------------|---------------------|----------------|--------------------------|------------------|
| 2441-45G | i7-3820QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | None | Intel 6205 ²⁸ | WWAN upg | Finger | 9 | vPro G | Win8 Pro64 10/12 |
| 2441-46G | i7-3720QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | None | Intel 6205 | WWAN upg | Finger | 9 | vPro G | Win8 Pro64 10/12 |

- **A depot repair service 3-year limited warranty**
- **Power-packed engineering with Open GL graphics and ISV certifications**

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|---|
| Positioning Processor | <i>Mobile workstation; two spindles</i> Intel® Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology Intel Core i7-3820QM processor (4 cores, 2.70GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models <ul style="list-style-type: none"> • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Memory | <i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets <i>All:</i> PC3-12800 1600MHz DDR3, non-parity, dual-channel capable | | | | | | | | | | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | |
| Color calibration Camera | Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M , PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.76 lb (2.62kg); <i>9-cell:</i> starting at 6.19 lb (2.81kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr, 0A36304):</i> up to 25.6 hr | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | Supports ThinkVantage® technologies 170-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad W530 2447 (Optimus) - Onsite

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB ⁸ rpm | RAID | SATA optical | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Mini Card SIM card | Smart Card Reader | Bat-tery calib cells | Global (G) Intel AMT vPro (P) Preload |
|--|--|--------|---------------------|-------------------|-------------------------------|------|--------------|----------------------------|------------------------|----------------------------|--------------------|-------------------|----------------------|---------------------------------------|
| 2447-44G | i7-3720QM | 4GBx1 | HD+ | K1000M | 1x500G 7200 | No | DVD±RW | Backlit 6300 ²⁸ | 6300 upg | None | None | Smart X-Rite 9 | iAMT vPro | Pro 64 |
| 2447-43G | i7-3820QM | 4GBx2 | FHD | K2000M | 1x500G 7200 | No | DVD±RW | Backlit 6300 | 6300 upg | None | None | None | X-Rite 9 | iAMT vPro Pro 64 |
| 2447-3TG | i7-3720QM | 4GBx1 | FHD | K1000M | 2x500G 7200 | 1 | None | None | 6205 ²⁸ upg | None | None | None | None | 9 iAMT vPro G P Pro 64 |
| 2447-3SG | i7-3720QM | 4GBx1 | FHD | K1000M | 2x500G 7200 | 0 | None | None | 6205 upg | None | None | None | None | 9 iAMT vPro G P Pro 64 |
| 2447-2EG | i7-3610QM | 4GBx1 | HD+ | K1000M | 1x500G 7200 | No | DVD±RW | Backlit 6300 | 6300 upg | None | None | None | None | 9 iAMT vPro Pro 64 |
| 2447-29G | i7-3720QM | 4GBx2 | FHD | K1000M | 1x180G SSD | No | DVD±RW | None | 6205 | Ericsson | Lenovo | Smart None | 9 | iAMT vPro Pro 64 |
| 2447-23G | i7-3820QM | 4GBx2 | FHD | K2000M | 1x500G 7200 | No | DVD±RW | None | 6205 | upg | None | None | None | 9 iAMT vPro G P Pro 64 |
| 2447-22G | i7-3720QM | 4GBx1 | HD+ | K1000M | 1x320G 7200 | No | DVD±RW | None | 6205 | upg | None | None | None | 9 iAMT vPro G P Pro 64 |
| Positioning Processor | <i>Mobile workstation; two spindles</i> Intel® Core™ i7-3610QM processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3720QM processor (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology Intel Core i7-3820QM processor (4 cores, 2.70GHz, 8MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology | | | | | | | | | | | | | |
| Memory | <i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets <i>All:</i> PC3-12800 1600MHz DDR3, non-parity, dual-channel capable | | | | | | | | | | | | | |
| Optical Ultrabay SATA disk | <i>Some:</i> DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | | | | |
| Color calibration Camera | <i>Some:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M , PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>15.6W"</i> (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.76 lb (2.62kg); <i>9-cell:</i> starting at 6.19 lb (2.81kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 25.6 hr | | | | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | | |
| | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) • X-Rite® Pantone® Color Calibrator (color calibration models) | | | | | | | | | | | | | |
| | Supports ThinkVantage® technologies 170-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad W530 2447 (Optimus) - Onsite - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB ¹ rpm | RAID | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Smart Card Reader | Battery Intel Pre-load (mm/yy) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------|-------------------------------|------|-------------------|---------------------|----------------------------|-------------------|--------------------------------|------------------|
| 2447-42G | i7-3720QM | 4GBx2 | 15.6" FHD | K1000M | 1x180G SSD | No | Backlit | 6300 ²⁸ | WWAN upg | None | Smart X-Rite 9 vPro | Pro 64 07/12 |
| 2447-3ZG | i7-3720QM | 4GBx2 | 15.6" FHD | K1000M | 1x128G SSD | No | None | 6205 ²⁸ | Ericsson | Lenovo | Smart X-Rite 9 vPro | Pro 64 07/12 |
| 2447-2BG | i7-3720QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | Backlit | 6300 | 16GB mSATA | None | Smart X-Rite 9 vPro | Pro 64 07/12 |
| 2447-2AG | i7-3820QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | Backlit | 6300 | 16GB mSATA | None | None X-Rite 9 vPro | Pro 64 07/12 |
| 2447-48G | i7-3720QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | Backlit | 6300 | 32GB mSATA | None | Smart X-Rite 9 vPro | Pro 64 07/12 |
| 2447-47G | i7-3820QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | Backlit | 6300 | 32GB mSATA | None | None X-Rite 9 vPro | Pro 64 07/12 |

• Power-packed engineering with Open GL graphics and ISV certifications

| | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Mobile workstation; two spindles</i> Intel® Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology Intel Core i7-3820QM processor (4 cores, 2.70GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | |
| Memory | <i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets <i>All:</i> PC3-12800 1600MHz DDR3, non-parity, dual-channel capable | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) • X-Rite® Pantone® Color Calibrator (color calibration models) | |
| Optical Ultrabay SATA disk | DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive <i>Some:</i> mSATA Solid State Drive (SSD), via PCIe Mini Card slot | | | | | | | | | | | |
| mSATA™ SSD | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | | |
| Color calibration Camera | <i>Some:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M , PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>6-cell:</i> starting at 5.76 lb (2.62kg); <i>9-cell:</i> starting at 6.19 lb (2.81kg) <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication <i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus 9-cell Slice battery (94Whr):</i> up to 25.6 hr | | | | | | | | | | | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | Mobile Intel QM77 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | Supports ThinkVantage® technologies | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | 170-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |

See footnotes for more detailed information

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ThinkPad W530 2447 (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB ² rpm | RAID | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Smart Card Reader | Battery cells | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------|-------------------------------|------|-------------------|--------------------------|----------------------------|-------------------|---------------|---------------------------|------------------|
| 2447-45G | i7-3720QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | None | Intel 6205 ²⁸ | WWAN upg | None | 9 | vPro G P | Win8 Pro64 10/12 |
| 2447-46G | i7-3820QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | None | Intel 6205 | WWAN upg | None | 9 | vPro G P | Win8 Pro64 10/12 |
| 2447-4JG | i7-3720QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | Backlit | Intel 6300 ²⁸ | 32GB mSATA | Smart | 9 | vPro | Win7 Pro64 10/12 |
| 2447-4HG | i7-3720QM | 4GBx2 | 15.6" FHD | K2000M | 1x240G FDE SSD | No | Backlit | Intel 6300 | WWAN upg | Smart | 9 | vPro | Win7 Pro64 10/12 |
| 2447-4GG | i7-3820QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | Backlit | Intel 6300 | 32GB mSATA | None | 9 | vPro | Win7 Pro64 10/12 |
| 2447-4BG | i7-3720QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | Backlit | Intel 6300 | 32GB mSATA | Smart | 9 | vPro | Win8 Pro64 10/12 |
| 2447-4AG | i7-3720QM | 4GBx2 | 15.6" FHD | K2000M | 1x240G FDE SSD | No | Backlit | Intel 6300 | WWAN upg | Smart | 9 | vPro | Win8 Pro64 10/12 |
| 2447-49G | i7-3820QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | Backlit | Intel 6300 | 32GB mSATA | None | 9 | vPro | Win8 Pro64 10/12 |

- Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty
- Power-packed engineering with Open GL graphics and ISV certifications

| | | |
|--------------------------------|---|---|
| Positioning | <i>Mobile workstation; two spindles</i> | Preloaded operating system²⁰ - Some: Windows [®] 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo [®] Message Center Plus • ThinkVantage Product Recovery • Access Connections [™] • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe [®] Reader [®] • Windows Live [™] Essentials • Corel [®] WinDVD [®] (DVD±RW) • Corel Burn.Now [™] Lenovo Edition (DVD±RW) • Corel DVD MovieFactory [®] Lenovo Edition (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft [®] Office preloaded; purchase a product key to activate • Norton [™] Internet Security (30 days of virus definitions) |
| Processor | Intel [®] Core [™] i7-3720QM processor (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology Intel Core i7-3820QM processor (4 cores, 2.70GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology | |
| Memory | <i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets <i>All:</i> PC3-12800 1600MHz DDR3, non-parity, dual-channel capable | |
| Optical | DVD burner, 12.7mm Ultrabay Enhanced, removable | |
| Ultrabay | One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access | |
| SATA disk | <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System [™] <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive <i>Some:</i> mSATA Solid State Drive (SSD), via PCIe Mini Card slot | |
| mSATA [™] SSD | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | |
| Color calibration | Pantone [®] color calibrator by X-Rite [®] color calibration sensor in palm rest, LED indicator | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | NVIDIA [®] Optimus [™] technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro [®] K1000M or K2000M, PCI Express [®] x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | |
| TrackPoint [®] | TrackPoint [®] pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | |
| Touchpad | UltraNav [™] , wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | |
| ThinkLight [™] | Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ | 15.6W" (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm | |
| Weight ² | 6-cell: starting at 5.76 lb (2.62kg); 9-cell: starting at 6.19 lb (2.81kg) | |
| Case material | <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | |
| Battery - type | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication | |
| Battery - life ¹⁰ | 6-cell (57Whr): up to 7.7 hr; 9-cell (94Whr): up to 12.8 hr; 9-cell plus 9-cell Slice battery (94Whr, 0A36304): up to 25.6 hr | |
| Chipset | Mobile Intel QM77 Express Chipset | |
| ExpressCard | One slot (ExpressCard/34) | |
| Smart Card Read | <i>Some:</i> Smart Card reader | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| Ports | Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino [®] Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 | |
| PCIe WWAN | <i>Some:</i> Wireless WAN upgradable | |
| SIM card | None | |
| Modem | None | |
| Bluetooth [™] | Bluetooth 4.0 wireless | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | |
| Intel AMT | Intel Active Management Technology (iAMT) | |
| Audio support | HD Audio, Realtek [®] ALC3202 codec, Dolby [®] Home Theater [®] v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |
| | Supports ThinkVantage [®] technologies | |
| | 170-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT [™] Gold rating ENERGY STAR [®] 5.0-compliant GREENGUARD [®] certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | |

See footnotes for more detailed information

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ThinkPad W530 2447 (Optimus) - Onsite (Windows 8) - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB ³ rpm | RAID | Backlit key-board | PCIe Mini Card WLAN | Color calib | Bat-tery cells | Power Adapter (watt) | Intel AMT | Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|--------------------------------|--|--------|---------------------|-------------------|-------------------------------|------|-------------------|--------------------------|-------------|----------------|----------------------|---|------------|--------------------|------------|------------------|
| 2447-4MG | i5-3320M | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | Backlit | Intel 6300 ²⁸ | None | 9 | 135W | iAMT | vPro | | Win7 Pro64 | 10/12 |
| 2447-4LG | i5-3320M | 4GBx1 | 15.6" FHD | K1000M | 1x500G 7200 | No | Backlit | Intel 6300 | None | 9 | 135W | iAMT | vPro | | Win7 Pro64 | 10/12 |
| 2447-4KG | i7-3630QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | Backlit | Intel 6300 | None | 9 | 170W | None | No | | Win7 Pro64 | 10/12 |
| 2447-4EG | i7-3630QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | Backlit | Intel 6300 | None | 9 | 170W | None | No | | Win8 Pro64 | 10/12 |
| 2447-4DG | i5-3320M | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | Backlit | Intel 6300 | None | 9 | 135W | iAMT | vPro | | Win8 Pro64 | 10/12 |
| 2447-4CG | i5-3320M | 4GBx1 | 15.6" FHD | K1000M | 1x500G 7200 | No | Backlit | Intel 6300 | None | 9 | 135W | iAMT | vPro | | Win8 Pro64 | 10/12 |
| 2447-5KG | i7-3840QM | 4GBx1 | 15.6" FHD | K2000M | 1x500G 7200 | No | None | Intel 6205 ²⁸ | X-Rite | 9 | 170W | iAMT | vPro | G P | Win8 Pro64 | 05/13 |
| 2447-5JG | i7-3840QM | 4GBx1 | 15.6" FHD | K1000M | 1x500G 7200 | No | None | Intel 6205 | X-Rite | 9 | 170W | iAMT | vPro | G P | Win8 Pro64 | 05/13 |
| 2447-5HG | i7-3840QM | 4GBx2 | 15.6" FHD | K2000M | 1x500G 7200 | No | None | Intel 6205 | X-Rite | 9 | 170W | iAMT | vPro | G P | Win8 Pro64 | 05/13 |
| 2447-5GG | i7-3840QM | 4GBx2 | 15.6" HD+ | K2000M | 1x500G 7200 | No | None | Intel 6205 | X-Rite | 9 | 170W | iAMT | vPro | G P | Win8 Pro64 | 05/13 |
| 2447-5FG | i7-3740QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | None | Intel 6205 | X-Rite | 9 | 170W | iAMT | vPro | G P | Win8 Pro64 | 05/13 |
| Positioning Processor | <i>Mobile workstation; two spindles</i> Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3630QM processor (4 cores, 2.40GHz, 6MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.40GHz), HT technology Intel Core i7-3740QM processor (4 cores, 2.70GHz, 6MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology Intel Core i7-3840QM processor (4 cores, 2.80GHz, 8MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.80GHz), HT technology | | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows [®] 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) | | | | |
| Memory | <i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets <i>All:</i> PC3-12800 1600MHz DDR3, non-parity, dual-channel capable | | | | | | | | | | | Windows 7 models <ul style="list-style-type: none"> Lenovo® Message Center Plus ThinkVantage Product Recovery Access Connections™ ThinkVantage Power Manager Lenovo SimpleTap Adobe® Reader® Windows Live™ Essentials Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW) Corel DVD MovieFactory® Lenovo Edition (DVD±RW) | | | | |
| Optical | DVD burner, 12.7mm Ultrabay Enhanced, removable | | | | | | | | | | | Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Companion Lenovo QuickLaunch AccuWeather PC Device Stage Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) | | | | |
| Ultrabay | One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access | | | | | | | | | | | | | | | |
| SATA disk | <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive | | | | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut | | | | | | | | | | | All models <ul style="list-style-type: none"> Lenovo Solution Center Password Manager ThinkVantage System Update Fingerprint Software (fingerprint models) Lenovo Cloud Storage by SugarSync Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) | | | | |
| Color calibration | <i>Some:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator | | | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M , PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; <i>Maximum external resolution:</i> 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) | | | | | | | | | | | | | | | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | | | | | | | | | | | Supports ThinkVantage® technologies 135-watt or 170-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | | | |
| Touchpad | UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch | | | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | | | |
| Dimensions ³ | 15.6W" (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm | | | | | | | | | | | | | | | |
| Weight ² | 6-cell: starting at 5.76 lb (2.62kg); 9-cell: starting at 6.19 lb (2.81kg) | | | | | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint | | | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication | | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (57Whr): up to 7.7 hr; 9-cell (94Whr): up to 12.8 hr; 9-cell plus 9-cell Slice battery (94Whr, 0A36304): up to 25.6 hr | | | | | | | | | | | | | | | |
| Chipset | Mobile Intel QM77 Express Chipset | | | | | | | | | | | | | | | |
| ExpressCard | One slot (ExpressCard/34) | | | | | | | | | | | | | | | |
| Smart Card Read | None | | | | | | | | | | | | | | | |
| Multicard Reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | | | | | | |
| Ports | Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) | | | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | | | |
| PCIe WLAN ⁴ | <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 | | | | | | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | | | | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | | | | | | | | | | | | | | | |
| Intel AMT | <i>Some:</i> Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack | | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad W530 2447 (Optimus) - Onsite (Windows 8) - III

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB ⁹ rpm | RAID | SATA optical | Backlit key-board | PCIe Mini Card WWAN/mSATA | Smart Card Reader | Bat-tery cells | Power Adapter (watt) | Intel vPro | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------|-------------------------------|------|--------------|-------------------|---------------------------|-------------------|----------------|----------------------|------------|------------------|
| 2447-59G | i7-3840QM | 8GBx1 | 15.6" FHD | K2000M | 1T 5400 + 240G FDE SSD | No | None | Backlit | WWAN upg | None | 9 | 170W | vPro | 03/13 |
| 2447-58G | i7-3740QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | DVD±RW | Backlit | 32GB mSATA | Smart | 9 | 135W | vPro | 03/13 |
| 2447-57G | i7-3740QM | 8GBx1 | 15.6" FHD | K2000M | 1x240G FDE SSD | No | DVD±RW | Backlit | WWAN upg | Smart | 9 | 170W | vPro | 03/13 |
| 2447-54G | i7-3840QM | 8GBx1 | 15.6" FHD | K2000M | 1x500G 7200 | No | DVD±RW | Backlit | 32GB mSATA | None | 9 | 170W | vPro | 03/13 |
| 2447-5MG | i7-3840QM | 8GBx1 | 15.6" FHD | K2000M | 1T 5400 + 256G SSD OPAL | No | None | Backlit | WWAN upg | None | 9 | 170W | vPro | 06/13 |
| 2447-5LG | i7-3740QM | 8GBx1 | 15.6" FHD | K2000M | 1x256G SSD OPAL | No | DVD±RW | Backlit | WWAN upg | Smart | 9 | 170W | vPro | 06/13 |

• **Power-packed engineering with Open GL graphics and ISV certifications**

| | | |
|--|--|---|
| Positioning Processor | <p><i>Mobile workstation; two spindles</i></p> <p>Intel® Core™ i7-3740QM processor (4 cores, 2.70GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology</p> <p>Intel Core i7-3840QM processor (4 cores, 2.80GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.80GHz), HT technology</p> | <p>Preloaded operating system²⁰</p> <ul style="list-style-type: none"> - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit |
| Memory | <p><i>dual-core model:</i> 16GB max⁷, two 204-pin SO-DIMM sockets</p> <p><i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets</p> <p><i>All:</i> PC3-12800 1600MHz DDR3, non-parity, dual-channel capable</p> | <p>Preloaded applications⁵ (only some listed)</p> <ul style="list-style-type: none"> - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) |
| Optical Ultrabay SATA disk | <p><i>Some:</i> DVD burner, 12.7mm Ultrabay Enhanced, removable</p> <p>One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access</p> <p><i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high</p> <p><i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™</p> <p><i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive</p> <p><i>Some:</i> mSATA Solid State Drive (SSD), via PCIe Mini Card slot</p> | <ul style="list-style-type: none"> • Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • AccuWeather • PC Device Stage • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) |
| mSATA™ SSD | <p><i>Some:</i> 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut</p> <p><i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut</p> | <ul style="list-style-type: none"> • All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Widescreen display | <p><i>Some:</i> 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut</p> <p><i>Some:</i> 15.6" (396mm) Full HD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut</p> | |
| Color calibration Camera | <p>Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator</p> <p>HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus</p> | |
| Graphics | <p>NVIDIA™ Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M, PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays;</p> <p><i>Maximum external resolution:</i> 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA)</p> | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | <p>6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight</p> <p>TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass</p> <p>UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch</p> <p>Illuminates the keyboard to improve visibility in low-light conditions</p> | |
| Dimensions ³ Weight ² Case material | <p>15.6W" (WxDxH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm</p> <p>6-cell: starting at 5.76 lb (2.62kg); 9-cell: starting at 6.19 lb (2.81kg)</p> <p><i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid;</p> <p><i>Bottom:</i> Glass-fiber reinforced plastic without paint</p> | |
| Battery - type Battery - life ¹⁰ | <p>Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication</p> <p>6-cell (57Whr): up to 7.7 hr; 9-cell (94Whr): up to 12.8 hr;</p> <p>9-cell plus 9-cell Slice battery (94Whr, 0A36304): up to 25.6 hr</p> | |
| Chipset ExpressCard Smart Card Read Multicard Reader Ports | <p>Mobile Intel QM77 Express Chipset</p> <p>One slot (ExpressCard/34)</p> <p><i>Some:</i> Smart Card reader</p> <p>4-in-1 reader (MMC, SD, SDHC, SDXC)</p> <p>Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)</p> | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <p>Two PCI Express Mini Card slots</p> <p>11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3</p> <p><i>Some:</i> Wireless WAN upgradable</p> <p>None</p> <p>None</p> <p>Bluetooth 4.0 wireless</p> <p>Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1</p> <p>Intel Active Management Technology (iAMT)</p> <p>HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack</p> | <p>Supports ThinkVantage® technologies</p> |
| Security Security chip Fingerprint reader | <p>Power-on password, hard disk password, supervisor password, security keyhole</p> <p>Trusted Platform Module, TCG 1.2-compliant</p> <p>AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip</p> | <p>135-watt or 170-watt AC adapter</p> <p>ThinkPad Roll Cage (one-piece magnesium frame)</p> <p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.0-compliant</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p> |
| Limited warranty ¹² | <p>3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available</p> | <p>International Warranty Service¹⁷</p> <p>24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p> |

See footnotes for more detailed information

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Lenovo® ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540

ThinkPad W540 Platform Specifications

Product Specifications Reference (PSREF)

| | | | | | | | | | | | |
|--------------------------------|--|--|--------------|----------------|---------------------|-------|--------------|------------------------|--|---|----------------------------|
| Positioning | <i>Mobile workstation; two spindles</i> | | | | | | | | Audio support | HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack | |
| Processor | 4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor | | | | | | | | WLAN ⁴ | One of the following, configurable by model: | |
| | Processor Number | # of Cores | # of Threads | Base Frequency | Max Turbo Frequency | Cache | Memory Speed | Processor Graphics | | <ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card | |
| | i5-4200M | 2 | 4 | 2.5 GHz | 3.1 GHz | 3MB | DDR3L-1600 | Intel HD Graphics 4600 | | <i>WWAN (optional)</i> One of the following, configurable by model (mutually exclusive with M.2 SSD): <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) | |
| | i5-4210M | | | 2.6 GHz | 3.2 GHz | 3MB | | | | | |
| | i5-4330M | | | 2.8 GHz | 3.5 GHz | 3MB | | | | | |
| | i7-4600M | | | 2.9 GHz | 3.6 GHz | 4MB | | | | | |
| | i7-4700MQ | 4 | 8 | 2.4 GHz | 3.4 GHz | 6MB | | | | | |
| | i7-4710MQ | | | 2.5 GHz | 3.5 GHz | 6MB | | | | | |
| | i7-4800MQ | | | 2.7 GHz | 3.7 GHz | 6MB | | | | | |
| | i7-4810MQ | | | 2.8 GHz | 3.8 GHz | 6MB | | | | | |
| i7-4900MQ | 2.8 GHz | | | 3.8 GHz | 8MB | | | | | | |
| i7-4910MQ | 2.9 GHz | | | 3.9 GHz | 8MB | | | | | | |
| i7-4930MX | 3 GHz | 3.9 GHz | 8MB | | | | | | | | |
| Memory | <i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets, only 4+4, 8+8, 4+4+4+4, and 8+8+8+8 combinations supported <i>All:</i> PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable | | | | | | | | SIM card (optional) | <i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider | |
| Optical (optional) | DVD burner, 9.5mm Ultrabay slim, removable | | | | | | | | Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | |
| Ultrabay | One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access | | | | | | | | Ethernet | Intel Ethernet Connection I217-LM (Clarkville) | |
| Storage | <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high | | | | | | | | NFC | <i>Optional:</i> Near Field Communication | |
| | <i>Some:</i> Hard Disk Drive (HDD) / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ | | | | | | | | Security chip | Power-on password, hard disk password, supervisor password, security keyhole | |
| M.2 SSD | <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted | | | | | | | | vPro (optional) | Trusted Platform Module, TCG 1.2-compliant | |
| | <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card | | | | | | | | Fingerprint reader | <i>Optional:</i> Fingerprint reader on the palm rest, swipe sensor | |
| Widescreen display | <i>Some:</i> 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio | | | | | | | | Limited warranty ¹² One of the following, configurable by model: | | |
| Multi-touch | <i>Some:</i> 15.5" (394mm) 3K (2880x1620) , anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS | | | | | | | | <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) | | |
| | Color calibration | <i>None</i> | | | | | | | | Preload | Windows® 7 Professional 64 |
| Camera (optional) | <i>Optional:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator | | | | | | | | preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M , PCI Express® x16, 2GB memory, supports external analog monitor via VGA and digital monitor via Mini DisplayPort / Thunderbolt™; supports three independent displays; | | | | | | | | <ul style="list-style-type: none"> Lenovo Solution Center ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Adobe® Reader® Nitro Pro Evernote® Skype™ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) | | |
| | Keyboard | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight | | | | | | | | <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) | |
| UltraNav™ | TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch | | | | | | | | <ul style="list-style-type: none"> Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) | | |
| ThinkLight™ | <i>None</i> | | | | | | | | <ul style="list-style-type: none"> Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) | | |
| Dimensions ³ | 15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm | | | | | | | | <p><i>For ISV certifications, please visit www.lenovo.com/support/ISV</i></p> | | |
| Weight ² | 6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg) | | | | | | | | Environment | | |
| Case material | Glass-Fiber Reinforced Plastic | | | | | | | | EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant | | |
| Battery type | Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication | | | | | | | | | | |
| Max battery life ¹⁰ | 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr | | | | | | | | | | |
| AC adapter | <i>dual-core:</i> 135-watt AC adapter; <i>quad-core:</i> 170-watt AC adapter | | | | | | | | | | |
| Chipset | Mobile Intel QM87 Express Chipset | | | | | | | | | | |
| ExpressCard | One slot (ExpressCard/34) | | | | | | | | | | |
| Smart card reader | <i>Optional:</i> Smart card reader | | | | | | | | | | |
| Media reader | 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card | | | | | | | | | | |
| Ports | Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector | | | | | | | | | | |

ThinkPad W540 20BG (Optimus) - TopSeller

Product Specifications Reference (PSREF)

| Model | Processor | vPro | Graphics | Memory | Display | Storage | RAID | Optical | WLAN & Bluetooth | WWAN / M.2 SSD | SIM card | Smart card reader | Camera | Backlit key-board | Finger-print reader | NFC | Color calibrator | Battery cells | Power adapter (watt) | Preload | Base warranty (year) | Global | Ann date (m/y) | |
|------------|-----------|------|----------|--------|-----------|----------|------|---------|------------------|----------------|----------|-------------------|--------|-------------------|---------------------|------|------------------|---------------|----------------------|-----------|----------------------|---------|----------------|-------|
| 20BG003X++ | i7-4810MQ | vPro | K1100M | 8GBx2 | 15.6" FHD | 1T 5400 | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | Smart | 720p | None | Finger | None | None | 9 | 170W | Win8.1 DG | Win7 | 3-depot | No | 06/14 |
| 20BG003Y++ | i7-4710MQ | No | K1100M | 8GBx1 | 15.6" FHD | 1T 5400 | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | Smart | 720p | None | Finger | None | None | 9 | 170W | Win8.1 DG | Win7 | 3-depot | No | 06/14 |
| 20BG0040++ | i7-4810MQ | vPro | K1100M | 8GBx1 | 15.6" FHD | 1T 5400 | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | Smart | 720p | None | Finger | None | None | 9 | 170W | Win8.1 DG | Win7 | 3-depot | No | 06/14 |
| 20BG0041++ | i7-4810MQ | vPro | K1100M | 8GBx2 | 15.6" FHD | 512G SSD | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | Smart | 720p | None | Finger | None | None | 9 | 170W | Win8.1 DG | Win7 | 3-depot | No | 06/14 |

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

| | | | | | | | | | | | | | | |
|---------------------------------|---|--|--|--|--|-------------------|--------------------------------|--|--|--|--|--|--|--|
| Processor | 4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor | | | | | | Dimensions ³ | | 15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm | | | | | |
| | Processor # of Cores Base Frequency Max Turbo Frequency Cache Memory Speed | | | | | | Weight ² | | 6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg) | | | | | |
| | i5-4200M 2 2.5 GHz 3.1 GHz 3MB | | | | | | Case material | | Glass-Fiber Reinforced Plastic | | | | | |
| | i5-4210M 2 2.6 GHz 3.2 GHz 3MB | | | | | | Battery type | | Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication | | | | | |
| | i5-4330M 2 2.8 GHz 3.5 GHz 3MB | | | | | | Max battery life ¹⁰ | | 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr | | | | | |
| | i7-4600M 4 2.9 GHz 3.6 GHz 4MB | | | | | | AC adapter | | dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter | | | | | |
| | i7-4700MQ 4 2.4 GHz 3.4 GHz 6MB | | | | | | Audio support | | HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack | | | | | |
| | i7-4710MQ 4 2.5 GHz 3.5 GHz 6MB | | | | | | Chipset | | Mobile Intel QM87 Express Chipset | | | | | |
| | i7-4800MQ 4 2.7 GHz 3.7 GHz 6MB | | | | | | ExpressCard | | One slot (ExpressCard/34) | | | | | |
| | i7-4810MQ 4 2.8 GHz 3.8 GHz 6MB | | | | | | Smart card reader | | Optional: Smart card reader | | | | | |
| i7-4900MQ 4 2.8 GHz 3.8 GHz 8MB | | | | | | Media reader | | 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card | | | | | | |
| i7-4910MQ 4 2.9 GHz 3.9 GHz 8MB | | | | | | Ports | | Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector | | | | | | |
| i7-4930MX 4 3 GHz 3.9 GHz 8MB | | | | | | WLAN ⁴ | | 11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card | | | | | | |
| Memory | dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, only 4+4, 8+8, 4+4+4+4, and 8+8+8+8 combinations supported All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable | | | | | | WWAN (optional) | | Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS | | | | | |
| Optical (optional) | DVD burner, 9.5mm Ultrabay slim, removable | | | | | | SIM card (opt) | | Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider | | | | | |
| Ultrabay | One modular bay for removable devices (right side, cold swap), 9.5mm high | | | | | | Bluetooth™ | | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | |
| Storage | Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS | | | | | | Ethernet | | Intel Ethernet Connection I217-LM (Clarkville) | | | | | |
| M.2 SSD (opt) | M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card | | | | | | NFC (optional) | | Near Field Communication | | | | | |
| Widescreen display | Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS | | | | | | Security | | Power-on password, hard disk password, supervisor password, security keyhole | | | | | |
| Multi-touch | None | | | | | | Security chip | | Trusted Platform Module, TCG 1.2-compliant | | | | | |
| Color calibration | Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest | | | | | | vPro (optional) | | Intel vPro Technology | | | | | |
| Camera (optional) | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | Fingerprint reader | | Optional: Fingerprint reader on the palm rest, swipe sensor | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory | | | | | | Preload | | Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight | | | | | | Limited warranty ¹² | | 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite | | | | | |
| UltraNav™ | TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch | | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | | |

See footnotes for more detailed information

(G-KM1W-1) © Lenovo

ThinkPad W540 20BG (Optimus) - TopSeller (Onsite)

Product Specifications Reference (PSREF)

| Model | Processor | vPro | Graphics | Memory | Display | Storage | RAID | Optical | WLAN & Bluetooth | WWAN / M.2 SSD | SIM card | Smart card reader | Camera | Backlit key-board | Finger-print reader | NFC | Color cali-brator | Bat-tery adapter (watt) | Power | Preload | Base warranty (year) | Glob-al | Ann date (m/y) | |
|------------|----------------|--------|----------|--------------|------------|-----------------|--------|------------|------------------|----------------|----------|-------------------|---------|-------------------|---------------------|--------|-------------------|-------------------------|-----------|-----------|----------------------|----------|----------------|-------|
| 20BG0045++ | i7-4710MQ | No | K1100M | 4GBx1 | 15.6" FHD | 256G SSD eDrive | No | DVD±RW | 7260 ac+BT | Upg | None | Smart | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8.1 DG | Win7 | 3-onsite | No | 06/14 |
| 20BG0046++ | i7-4710MQ | No | K1100M | 4GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | Smart | 720p | Backlit | Finger | None | None | 9 | 170W | Win8.1 DG | Win7 | 3-onsite | No | 06/14 |
| 20BG0047++ | i5-4210M | No | K1100M | 4GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 135W | Win8.1 DG | Win7 | 3-onsite | No | 06/14 |
| 20BG001E++ | i7-4700MQ | No | K1100M | 4GBx1 | 15.6" FHD | 256G SSD eDrive | No | DVD±RW | 7260 ac+BT | Upg | None | Smart | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 11/13 |
| 20BG001H++ | i5-4200M | No | K1100M | 4GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 135W | Win8 DG | Win7 | 3-onsite | No | 11/13 |
| 20BG001K++ | i7-4700MQ | No | K1100M | 4GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | Smart | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 11/13 |
| 20BG001T++ | i5-4330M vPro | K1100M | 8GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 135W | Win8 DG | Win7 | 3-onsite | No | 11/13 | |
| 20BG002W++ | i7-4700MQ | No | K1100M | 4GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | EM7345 Select | Smart | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 01/14 | |
| 20BG0032++ | i7-4700MQ | No | K1100M | 4GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | EM7345 Select | Smart | None | Backlit | Finger | None | None | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 03/14 | |
| 20BG0042++ | i7-4910MQ vPro | K2100M | 8GBx1 | 15.5" 3K IPS | 512G SSD | No | DVD±RW | 7260 ac+BT | Upg | None | Smart | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8.1 DG | Win7 | 3-onsite | No | 06/14 | |
| 20BG0044++ | i7-4810MQ vPro | K2100M | 8GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | Smart | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8.1 DG | Win7 | 3-onsite | No | 06/14 | |
| 20BG001B++ | i7-4800MQ vPro | K2100M | 8GBx1 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 11/13 | |
| 20BG001C++ | i7-4900MQ vPro | K2100M | 8GBx1 | 15.5" 3K IPS | 512G SSD | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 11/13 | |
| 20BG001S++ | i7-4930MX vPro | K2100M | 8GBx2 | 15.5" 3K IPS | 2x512G SSD | 0 | None | 7260 ac+BT | N5321 Select | Smart | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 11/13 | | |
| 20BG002V++ | i7-4900MQ vPro | K2100M | 8GBx1 | 15.5" 3K IPS | 512G SSD | No | DVD±RW | 7260 ac+BT | EM7345 Select | None | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 01/14 | | |
| 20BG0031++ | i7-4900MQ vPro | K2100M | 8GBx1 | 15.5" 3K IPS | 512G SSD | No | DVD±RW | 7260 ac+BT | EM7345 Select | None | None | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 DG | Win7 | 3-onsite | No | 03/14 | | |

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

| Processor | 4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor | Dimensions ³ Weight ² Case material Battery type Max battery life ¹⁰ AC adapter | 15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm 6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg) Glass-Fiber Reinforced Plastic Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|----------------|---------------------|-------|--------------|----------|---|---------|---------|-----|------------|----------|---------|---------|-----|----------|---------|---------|-----|----------|---------|---------|-----|-----------|---|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|--|-------|---------|-----|---------------|--|
| | <table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>i5-4200M</td> <td rowspan="4">2</td> <td>2.5 GHz</td> <td>3.1 GHz</td> <td>3MB</td> <td rowspan="10">DDR3L-1600</td> </tr> <tr> <td>i5-4210M</td> <td>2.6 GHz</td> <td>3.2 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-4330M</td> <td>2.8 GHz</td> <td>3.5 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-4600M</td> <td>2.9 GHz</td> <td>3.6 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-4700MQ</td> <td rowspan="6">4</td> <td>2.4 GHz</td> <td>3.4 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4710MQ</td> <td>2.5 GHz</td> <td>3.5 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4800MQ</td> <td>2.7 GHz</td> <td>3.7 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4810MQ</td> <td>2.8 GHz</td> <td>3.8 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4900MQ</td> <td>2.8 GHz</td> <td>3.8 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-4910MQ</td> <td>2.9 GHz</td> <td>3.9 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-4930MX</td> <td></td> <td>3 GHz</td> <td>3.9 GHz</td> <td>8MB</td> </tr> </tbody> </table> | Processor | # of Cores | Base Frequency | Max Turbo Frequency | Cache | Memory Speed | i5-4200M | 2 | 2.5 GHz | 3.1 GHz | 3MB | DDR3L-1600 | i5-4210M | 2.6 GHz | 3.2 GHz | 3MB | i5-4330M | 2.8 GHz | 3.5 GHz | 3MB | i7-4600M | 2.9 GHz | 3.6 GHz | 4MB | i7-4700MQ | 4 | 2.4 GHz | 3.4 GHz | 6MB | i7-4710MQ | 2.5 GHz | 3.5 GHz | 6MB | i7-4800MQ | 2.7 GHz | 3.7 GHz | 6MB | i7-4810MQ | 2.8 GHz | 3.8 GHz | 6MB | i7-4900MQ | 2.8 GHz | 3.8 GHz | 8MB | i7-4910MQ | 2.9 GHz | 3.9 GHz | 8MB | i7-4930MX | | 3 GHz | 3.9 GHz | 8MB | Audio support | HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack |
| Processor | # of Cores | Base Frequency | Max Turbo Frequency | Cache | Memory Speed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4200M | 2 | 2.5 GHz | 3.1 GHz | 3MB | DDR3L-1600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4210M | | 2.6 GHz | 3.2 GHz | 3MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4330M | | 2.8 GHz | 3.5 GHz | 3MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4600M | | 2.9 GHz | 3.6 GHz | 4MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4700MQ | 4 | 2.4 GHz | 3.4 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4710MQ | | 2.5 GHz | 3.5 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4800MQ | | 2.7 GHz | 3.7 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4810MQ | | 2.8 GHz | 3.8 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4900MQ | | 2.8 GHz | 3.8 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4910MQ | | 2.9 GHz | 3.9 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4930MX | | 3 GHz | 3.9 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Chipset ExpressCard Smart card reader Media reader Ports | Mobile Intel QM87 Express Chipset One slot (ExpressCard/34) Optional: Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, only 4+4, 8+8, 4+4+4+4, and 8+8+8+8 combinations supported All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable | WLAN ⁴ | 11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Optical (optional) Ultrabay Storage | DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card | WWAN (optional) | Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M.2 SSD (opt) | | SIM card (opt) | Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Widescreen display Multi-touch Color calibration Camera (optional) | Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS None Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | Bluetooth™ Ethernet NFC (optional) | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel Ethernet Connection I217-LM (Clarkville) Near Field Communication | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory | Security Security chip vPro (optional) Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the palm rest, swipe sensor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard UltraNav™ | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch | Preload | Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ThinkLight™ | None | Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for more detailed information

(G-KM1W-2) © Lenovo

ThinkPad W540 20BG (Optimus) - TopSeller (Onsite) - II

Product Specifications Reference (PSREF)

| Model | Processor | vPro | Graphics | Memory | Display | Storage | RAID | Optical | WLAN & Bluetooth | WWAN / M.2 SSD | SIM card | Smart card reader | Camera | Backlit key-board | Finger-print reader | NFC | Color cali-brator | Bat-tery adapter (watt) | Power (watt) | Preload | Base warranty (year) | Glob-al | Ann- date (m/y) |
|------------|-----------|------|----------|--------|-----------|-----------------------------|------|---------|------------------|----------------|----------|-------------------|--------|-------------------|---------------------|------|-------------------|-------------------------|--------------|----------------|----------------------|---------|-----------------|
| 20BG001U++ | i7-4600M | vPro | K1100M | 8GBx1 | 15.6" FHD | 256G SSD eDrive + 500G 7200 | No | None | 7260 ac+BT | N5321 | Select | None | 720p | Backlit | Finger | None | X-Rite | 9 | 135W | Win8 DG Win7 | 3-onsite | No | 11/13 |
| 20BG0043++ | i7-4810MQ | vPro | K2100M | 8GBx1 | 15.6" FHD | 256G SSD eDrive + 1T 5400 | No | None | 7260 ac+BT | Upg | None | Smart | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8.1 DG Win7 | 3-onsite | No | 06/14 |
| 20BG001D++ | i7-4800MQ | vPro | K2100M | 8GBx1 | 15.6" FHD | 256G SSD eDrive + 1T 5400 | No | None | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 DG Win7 | 3-onsite | No | 11/13 |

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

| | | | | | | | | | | | |
|--------------------|---|------------|----------------|---------------------|-------|--|--|--|--|--|--|
| Processor | 4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor | | | | | Dimensions ³ | 15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm | | | | |
| | Processor | # of Cores | Base Frequency | Max Turbo Frequency | Cache | Weight ² | 6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg) | | | | |
| | i5-4200M | 2 | 2.5 GHz | 3.1 GHz | 3MB | Case material | Glass-Fiber Reinforced Plastic | | | | |
| | i5-4210M | | 2.6 GHz | 3.2 GHz | 3MB | Battery type | Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication | | | | |
| | i5-4330M | | 2.8 GHz | 3.5 GHz | 3MB | Max battery life ¹⁰ | 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr | | | | |
| | i7-4600M | | 2.9 GHz | 3.6 GHz | 4MB | AC adapter | dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter | | | | |
| | i7-4700MQ | | 2.4 GHz | 3.4 GHz | 6MB | Audio support | HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack | | | | |
| | i7-4710MQ | 4 | 2.5 GHz | 3.5 GHz | 6MB | Chipset | Mobile Intel QM87 Express Chipset | | | | |
| | i7-4800MQ | | 2.7 GHz | 3.7 GHz | 6MB | ExpressCard | One slot (ExpressCard/34) | | | | |
| | i7-4810MQ | | 2.8 GHz | 3.8 GHz | 6MB | Smart card reader | Optional: Smart card reader | | | | |
| | i7-4900MQ | | 2.8 GHz | 3.8 GHz | 8MB | Media reader | 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card | | | | |
| | i7-4910MQ | | 2.9 GHz | 3.9 GHz | 8MB | Ports | Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector | | | | |
| | i7-4930MX | | 3 GHz | 3.9 GHz | 8MB | WLAN ⁴ | 11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card | | | | |
| Memory | dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, only 4+4, 8+8, 4+4+4+4, and 8+8+8+8 combinations supported All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable | | | | | WWAN (optional) | Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS | | | | |
| Optical (optional) | DVD burner, 9.5mm Ultrabay slim, removable | | | | | SIM card (opt) | Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider | | | | |
| Ultrabay | One modular bay for removable devices (right side, cold swap), 9.5mm high | | | | | Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | |
| Storage | Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card | | | | | Ethernet | Intel Ethernet Connection I217-LM (Clarkville) | | | | |
| M.2 SSD (opt) | | | | | | NFC (optional) | Near Field Communication | | | | |
| Widescreen display | Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS | | | | | Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | |
| Multi-touch | None | | | | | Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | |
| Color calibration | Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest | | | | | vPro (optional) | Intel vPro Technology | | | | |
| Camera (optional) | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | Fingerprint reader | Optional: Fingerprint reader on the palm rest, swipe sensor | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory | | | | | Preload | Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight | | | | | Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite | | | | | |
| UltraNav™ | TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | |

See footnotes for more detailed information

(G-KM1W-5) © Lenovo

ThinkPad W540 20BH (Optimus) - Windows 8

Product Specifications Reference (PSREF)

| Model | Processor | vPro | Graphics | Memory | Display | Storage | RAID | Optical | WLAN & Bluetooth | WWAN / M.2 SSD | SIM card | Smart card reader | Camera | Backlit key-board | Finger-print reader | NFC | Color cali-brator | Bat-tery adapter (watt) | Power Preload | Base warranty (year) | Glob-al | Ann date (m/y) | |
|------------|-----------|------|----------|--------|--------------|-----------------|------|---------|------------------|----------------|----------|-------------------|--------|-------------------|---------------------|------|-------------------|-------------------------|---------------|----------------------|---------|----------------|-------|
| 20BH002C++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 180G SSD Opal | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 11/13 |
| 20BH002D++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.5" 3K IPS | 256G SSD eDrive | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 11/13 |
| 20BH002F++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 11/13 |
| 20BH002H++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 256G SSD eDrive | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 11/13 |
| 20BH002R++ | i7-4800MQ | vPro | K1100M | 8GBx1 | 15.6" FHD | 240G SSD Opal | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 11/13 |
| 20BH002T++ | i7-4800MQ | vPro | K1100M | 8GBx1 | 15.5" 3K IPS | 240G SSD Opal | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 11/13 |
| 20BH004M++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 180G SSD Opal | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 04/14 |
| 20BH004N++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | None | 720p | None | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 04/14 |
| 20BH004Q++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 128G SSD | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 04/14 |
| 20BH002K++ | i7-4800MQ | vPro | K2100M | 4GBx2 | 15.6" FHD | 256G SSD eDrive | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-depot | Yes | 11/13 |
| 20BH002P++ | i7-4800MQ | vPro | K2100M | 4GBx2 | 15.5" 3K IPS | 512G SSD | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 P64 | 3-depot | Yes | 11/13 |
| 20BH004P++ | i7-4800MQ | vPro | K2100M | 4GBx2 | 15.5" 3K IPS | 512G SSD | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | None | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 P64 | 3-depot | Yes | 04/14 |
| 20BH004R++ | i7-4900MQ | vPro | K2100M | 8GBx1 | 15.5" 3K IPS | 512G SSD | No | DVD±RW | 7260 a/b/g/n+BT | Upg | None | None | 720p | Backlit | Finger | NFC | X-Rite | 9 | 170W | Win8 P64 | 3-depot | Yes | 04/14 |

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

| Processor | 4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor | Dimensions ³ Weight ² Case material Battery type Max battery life ¹⁰ AC adapter | 15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm 6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg) Glass-Fiber Reinforced Plastic Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|----------------|---------------------|-------|--------------|----------|---|---------|---------|-----|------------|----------|---------|---------|-----|----------|---------|---------|-----|----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|--|-------|---------|-----|---------------|--|
| | <table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>i5-4200M</td> <td rowspan="5">2</td> <td>2.5 GHz</td> <td>3.1 GHz</td> <td>3MB</td> <td rowspan="10">DDR3L-1600</td> </tr> <tr> <td>i5-4210M</td> <td>2.6 GHz</td> <td>3.2 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-4330M</td> <td>2.8 GHz</td> <td>3.5 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-4600M</td> <td>2.9 GHz</td> <td>3.6 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-4700MQ</td> <td>2.4 GHz</td> <td>3.4 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4710MQ</td> <td rowspan="5">4</td> <td>2.5 GHz</td> <td>3.5 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4800MQ</td> <td>2.7 GHz</td> <td>3.7 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4810MQ</td> <td>2.8 GHz</td> <td>3.8 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4900MQ</td> <td>2.8 GHz</td> <td>3.8 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-4910MQ</td> <td>2.9 GHz</td> <td>3.9 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-4930MX</td> <td></td> <td>3 GHz</td> <td>3.9 GHz</td> <td>8MB</td> </tr> </tbody> </table> | Processor | # of Cores | Base Frequency | Max Turbo Frequency | Cache | Memory Speed | i5-4200M | 2 | 2.5 GHz | 3.1 GHz | 3MB | DDR3L-1600 | i5-4210M | 2.6 GHz | 3.2 GHz | 3MB | i5-4330M | 2.8 GHz | 3.5 GHz | 3MB | i7-4600M | 2.9 GHz | 3.6 GHz | 4MB | i7-4700MQ | 2.4 GHz | 3.4 GHz | 6MB | i7-4710MQ | 4 | 2.5 GHz | 3.5 GHz | 6MB | i7-4800MQ | 2.7 GHz | 3.7 GHz | 6MB | i7-4810MQ | 2.8 GHz | 3.8 GHz | 6MB | i7-4900MQ | 2.8 GHz | 3.8 GHz | 8MB | i7-4910MQ | 2.9 GHz | 3.9 GHz | 8MB | i7-4930MX | | 3 GHz | 3.9 GHz | 8MB | Audio support | HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack |
| Processor | # of Cores | Base Frequency | Max Turbo Frequency | Cache | Memory Speed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4200M | 2 | 2.5 GHz | 3.1 GHz | 3MB | DDR3L-1600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4210M | | 2.6 GHz | 3.2 GHz | 3MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4330M | | 2.8 GHz | 3.5 GHz | 3MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4600M | | 2.9 GHz | 3.6 GHz | 4MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4700MQ | | 2.4 GHz | 3.4 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4710MQ | 4 | 2.5 GHz | 3.5 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4800MQ | | 2.7 GHz | 3.7 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4810MQ | | 2.8 GHz | 3.8 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4900MQ | | 2.8 GHz | 3.8 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4910MQ | | 2.9 GHz | 3.9 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4930MX | | 3 GHz | 3.9 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Chipset | Mobile Intel QM87 Express Chipset | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ExpressCard | One slot (ExpressCard/34) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Smart card reader | Optional: Smart card reader | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Media reader | 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Ports | Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, only 4+4, 8+8, 4+4+4+4, and 8+8+8+8 combinations supported All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable | WLAN ⁴ | 11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Optical (optional) | DVD burner, 9.5mm Ultrabay slim, removable | WWAN (optional) | Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ultrabay | One modular bay for removable devices (right side, cold swap), 9.5mm high | SIM card (opt) | Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storage | Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card | Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M.2 SSD (opt) | | Ethernet | Intel Ethernet Connection I217-LM (Clarkville) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Widescreen display | Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS | NFC (optional) | Near Field Communication | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-touch | None | Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Color calibration | Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest | Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Camera (optional) | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | vPro (optional) | Intel vPro Technology | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory | Fingerprint reader | Optional: Fingerprint reader on the palm rest, swipe sensor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight | Preload | Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UltraNav™ | TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for more detailed information

(G-KM1W-3) © Lenovo

ThinkPad W540 20BH (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

| Model | Processor | vPro | Graphics | Memory | Display | Storage | RAID | Optical | WLAN & Bluetooth | WWAN / M.2 SSD | SIM card | Smart card reader | Camera | Backlit key-board | Finger-print reader | NFC | Color cali-brator | Bat-tery cells | Power adapter (watt) | Preload | Base warranty (year) | Glob-al | Ann date (m/y) |
|------------|-----------|------|----------|--------|--------------|-----------------|------|---------|------------------|----------------|----------|-------------------|--------|-------------------|---------------------|------|-------------------|----------------|----------------------|----------|----------------------|---------|----------------|
| 20BH002E++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 2x500G 7200 | 0 | None | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |
| 20BH002J++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.5" 3K IPS | 256G SSD eDrive | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |
| 20BH002M++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 256G SSD eDrive | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |
| 20BH002N++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 500G 7200 | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |
| 20BH002Q++ | i7-4800MQ | vPro | K1100M | 4GBx2 | 15.6" FHD | 180G SSD Opal | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |
| 20BH002S++ | i7-4800MQ | vPro | K1100M | 8GBx1 | 15.6" FHD | 240G SSD Opal | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |
| 20BH002U++ | i7-4800MQ | vPro | K1100M | 8GBx1 | 15.5" 3K IPS | 240G SSD Opal | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |
| 20BH002G++ | i7-4800MQ | vPro | K2100M | 4GBx2 | 15.6" FHD | 256G SSD eDrive | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | None | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |
| 20BH002L++ | i7-4800MQ | vPro | K2100M | 4GBx2 | 15.5" 3K IPS | 512G SSD | No | DVD±RW | 7260 ac+BT | Upg | None | None | 720p | Backlit | Finger | None | X-Rite | 9 | 170W | Win8 P64 | 3-onsite | Yes | 11/13 |

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

| Processor | 4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor | Dimensions ³ Weight ² Case material Battery type Max battery life ¹⁰ AC adapter | 15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm 6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg) Glass-Fiber Reinforced Plastic Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|--|---|----------------|---------------------|-------|--------------|----------|---|---------|---------|-----|------------|----------|---------|---------|-----|----------|---------|---------|-----|----------|---------|---------|-----|-----------|---|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|---------|---------|-----|-----------|--|-------|---------|-----|---|
| | <table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>i5-4200M</td> <td rowspan="4">2</td> <td>2.5 GHz</td> <td>3.1 GHz</td> <td>3MB</td> <td rowspan="10">DDR3L-1600</td> </tr> <tr> <td>i5-4210M</td> <td>2.6 GHz</td> <td>3.2 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-4330M</td> <td>2.8 GHz</td> <td>3.5 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-4600M</td> <td>2.9 GHz</td> <td>3.6 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-4700MQ</td> <td rowspan="6">4</td> <td>2.4 GHz</td> <td>3.4 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4710MQ</td> <td>2.5 GHz</td> <td>3.5 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4800MQ</td> <td>2.7 GHz</td> <td>3.7 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4810MQ</td> <td>2.8 GHz</td> <td>3.8 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4900MQ</td> <td>2.8 GHz</td> <td>3.8 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-4910MQ</td> <td>2.9 GHz</td> <td>3.9 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-4930MX</td> <td></td> <td>3 GHz</td> <td>3.9 GHz</td> <td>8MB</td> </tr> </tbody> </table> | Processor | # of Cores | Base Frequency | Max Turbo Frequency | Cache | Memory Speed | i5-4200M | 2 | 2.5 GHz | 3.1 GHz | 3MB | DDR3L-1600 | i5-4210M | 2.6 GHz | 3.2 GHz | 3MB | i5-4330M | 2.8 GHz | 3.5 GHz | 3MB | i7-4600M | 2.9 GHz | 3.6 GHz | 4MB | i7-4700MQ | 4 | 2.4 GHz | 3.4 GHz | 6MB | i7-4710MQ | 2.5 GHz | 3.5 GHz | 6MB | i7-4800MQ | 2.7 GHz | 3.7 GHz | 6MB | i7-4810MQ | 2.8 GHz | 3.8 GHz | 6MB | i7-4900MQ | 2.8 GHz | 3.8 GHz | 8MB | i7-4910MQ | 2.9 GHz | 3.9 GHz | 8MB | i7-4930MX | | 3 GHz | 3.9 GHz | 8MB | Audio support HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack Chipset Mobile Intel QM87 Express Chipset ExpressCard One slot (ExpressCard/34) Smart card reader <i>Optional:</i> Smart card reader Media reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector |
| Processor | # of Cores | Base Frequency | Max Turbo Frequency | Cache | Memory Speed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4200M | 2 | 2.5 GHz | 3.1 GHz | 3MB | DDR3L-1600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4210M | | 2.6 GHz | 3.2 GHz | 3MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i5-4330M | | 2.8 GHz | 3.5 GHz | 3MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4600M | | 2.9 GHz | 3.6 GHz | 4MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4700MQ | 4 | 2.4 GHz | 3.4 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4710MQ | | 2.5 GHz | 3.5 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4800MQ | | 2.7 GHz | 3.7 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4810MQ | | 2.8 GHz | 3.8 GHz | 6MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4900MQ | | 2.8 GHz | 3.8 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4910MQ | | 2.9 GHz | 3.9 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| i7-4930MX | | 3 GHz | 3.9 GHz | 8MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory | dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, only 4+4, 8+8, 4+4+4+4, and 8+8+8+8 combinations supported All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable | WLAN ⁴ 11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Optical (optional) | DVD burner, 9.5mm Ultrabay slim, removable | WWAN (optional) <i>Upg:</i> Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ultrabay | One modular bay for removable devices (right side, cold swap), 9.5mm high | SIM card (opt) <i>Lenovo:</i> Lenovo SIM, out-of-box service, pay-as-you-go, no contract required <i>Select:</i> User selectable, contract required with service provider | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storage | Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card | Bluetooth™ Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Ethernet Intel Ethernet Connection I217-LM (Clarkville) NFC (optional) Near Field Communication | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M.2 SSD (opt) | | Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, TCG 1.2-compliant vPro (optional) Intel vPro Technology Fingerprint reader <i>Optional:</i> Fingerprint reader on the palm rest, swipe sensor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Widescreen display | Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS | Preload <i>Win8 / 8.1 DG Win7:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <i>Win8 / 8.1 64:</i> Windows 8 / 8.1 64-bit <i>Win8 / 8.1 P64:</i> Windows 8 / 8.1 Pro 64-bit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-touch | None | Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Color calibration | <i>Optional:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Camera (optional) | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics | NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M , PCI Express® x16, 2GB memory | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UltraNav™ | TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

See footnotes for more detailed information

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Lenovo® ThinkPad X131e



Lenovo ThinkPad X131e



Lenovo ThinkPad X131e



Lenovo ThinkPad X131e



Lenovo ThinkPad X131e



Lenovo ThinkPad X131e

ThinkPad X131e 3368 (Intel) - TopSeller

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Top color | Finger print reader | Blue-tooth | Bat-tery cells | Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|----------|-----------|---------------------|------------|----------------|-----------------|----------|
| 3368-2NG | i3-2367M | 4GBx1 | 11.6" HD | 720p | 320G 7200 | TP 11a/b/g/n | WWAN upg | None | Black | None | BT | 6 | Pro 64 | 07/12 |
| 3368-3XG | i3-3227U | 4GBx1 | 11.6" HD | 720p | 320G 7200 | TP 11a/b/g/n | WWAN upg | None | Black | None | BT | 6 | Pro 64 | 02/13 |

- Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

| | | | | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning | <i>Entry ultraportable for excellent usability and reliability; one spindle</i> | | | | | | | | | | Preloaded operating system²⁰ | | | |
| Processor | Intel® Core™ i3-2367M processor (2 cores, 1.40GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Hyper-Threading technology Intel Core i3-3227U processor (2 cores, 1.90GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology | | | | | | | | | | Genuine Windows® 7 Professional 64 | | | |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | | |
| Optical SATA disk | None (use optional USB-based optical drive) <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable, Active Protection System™ | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • Symantec™ VIP • Windows Live™ Essentials | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | |
| Widescreen display | 11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 or 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Maximum external resolution:</i> 2048x1536 (VGA) @75Hz; 1920x1200 (HDMI) @60Hz | | | | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | | | | |
| Touch pad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | | |
| Dimensions ³ | 11.6W" (WxDxH): 11.6" x 8.5" x 1.27"; 293.4mm x 216mm x 32.3mm | | | | | | | | | | | | | |
| Weight ² | 6-cell: from 3.92 lb (1.78kg) | | | | | | | | | | | | | |
| Case color | Midnight black or Heatwave red (top); black bottom | | | | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell, HW Authentication | | | | | | | | | | | | | |
| Battery - life ¹⁰ | 6-cell (62.4Whr): up to 8.5 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel HM77 Express Chipset | | | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | | | |
| Ports | Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, ThinkPad a/b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter | | | | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2 watt x 2 / monaural digital microphone, combo audio/mic jack | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant GREENGUARD® certified ROHS-compliant | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | International Warranty Service ¹⁷ | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| Fingerprint reader | None | | | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X131e 3368 (Intel) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁵ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Top color | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|----------|-----------|---------------------|------------|----------------|------------|------------------|
| 3368-42G | i3-3227U | 4GBx1 | 11.6" HD | 720p | 320G 7200 | TP 11a/b/g/n | WWAN upg | None | Red | None | BT | 6 | Win7 Pro64 | 02/13 |
| 3368-3ZG | i3-3227U | 4GBx1 | 11.6" HD | 720p | 320G 7200 | TP 11a/b/g/n | WWAN upg | None | Black | None | BT | 6 | Win8 Pro64 | 02/13 |
| 3368-3YG | i3-3227U | 4GBx1 | 11.6" HD | 720p | 320G 7200 | TP 11a/b/g/n | WWAN upg | None | Black | None | BT | 6 | Win7 Pro64 | 02/13 |
| 3368-5KG | i3-3227U | 4GBx1 | 11.6" HD | 720p | 500G 7200 | TP 11a/b/g/n | Ericsson | select | Black | None | BT | 6 | Win8 Pro64 | 03/14 |
| 3368-5GG | i3-3227U | 4GBx1 | 11.6" HD | 720p | 500G 7200 | TP 11a/b/g/n | WWAN upg | None | Black | None | BT | 6 | Win8 Pro64 | 03/14 |
| 3368-5JG | i3-3227U | 4GBx1 | 11.6" HD | 720p | 500G 7200 | TP 11a/b/g/n | Ericsson | select | Black | None | BT | 6 | Win7 Pro64 | 03/14 |
| 3368-5HG | i3-3227U | 4GBx1 | 11.6" HD | 720p | 500G 7200 | TP 11a/b/g/n | WWAN upg | None | Black | None | BT | 6 | Win7 Pro64 | 03/14 |

• **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | |
|--------------------------------|--|---|
| Positioning Processor | <i>Entry ultraportable for excellent usability and reliability; one spindle</i> Intel® Core™ i3-3227U processor (2 cores, 1.90GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology | Preloaded operating system ²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | |
| Optical SATA disk | None (use optional USB-based optical drive) <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable, Active Protection System™ | Preloaded applications ⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch • PC Device Stage - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Skype™ |
| mSATA™ SSD | None | |
| Widescreen display | 11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Maximum external resolution:</i> 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | |
| TrackPoint® | TrackPoint pointing device, Internet Scroll Bar ¹³ | |
| Touch pad | UltraNav™, buttonless touchpad below keyboard, multi-touch | |
| ThinkLight™ | None | |
| Dimensions ³ | 11.6W" (WxDxH): 11.6" x 8.5" x 1.27"; 293.4mm x 216mm x 32.3mm | |
| Weight ² | 6-cell: from 3.92 lb (1.78kg) | |
| Case color | Midnight black or Heatwave red (top); black bottom | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | |
| Battery - type | Lithium Ion 6-cell, HW Authentication | |
| Battery - life ¹⁰ | 6-cell (62.4Whr): up to 8.5 hr | |
| Chipset | Mobile Intel HM77 Express Chipset | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | |
| ExpressCard | None | |
| Ports | Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter | |
| PCIe WWAN | <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | |
| Modem | None | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | |
| Intel AMT | None | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2 watt x 2 / monaural digital microphone, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | None | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | Supports ThinkVantage® technologies 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad X131e 3368 (Intel) - TopSeller (DOS)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁵ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Top color | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|----------|-----------|---------------------|------------|----------------|----------|------------------|
| 3368-5FG | i3-3227U | 4GBx1 | 11.6" HD | 720p | 500G 7200 | Intel 2230 | WWAN upg | None | Black | None | BT | 6 | DOS-Lic. | 03/14 |

• **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Entry ultraportable for excellent usability and reliability; one spindle</i> Intel® Core™ i3-3227U processor (2 cores, 1.90GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology | | | | | | | | | | | Preloaded operating system²⁰ - DOS-Lic. |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | | |
| Optical SATA disk | None (use optional USB-based optical drive) <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable, Active Protection System™ | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | 11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Maximum external resolution:</i> 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz | | | | | | | | | | | |
| Keyboard TrackPoint® | 6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | | |
| Touch pad ThinkLight™ | UltraNav™, buttonless touchpad below keyboard, multi-touch None | | | | | | | | | | | |
| Dimensions ³ Weight ² | <i>11.6W" (WxDxH):</i> 11.6" x 8.5" x 1.27"; 293.4mm x 216mm x 32.3mm <i>6-cell:</i> from 3.92 lb (1.78kg) | | | | | | | | | | | |
| Case color | Midnight black or Heatwave red (top); black bottom | | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell, HW Authentication | | | | | | | | | | | |
| Battery - life ¹⁰ | <i>6-cell (62.4Whr):</i> up to 8.5 hr | | | | | | | | | | | |
| Chipset | Mobile Intel HM77 Express Chipset | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | |
| Ports | Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter | | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2 watt x 2 / monaural digital microphone, combo audio/mic jack | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | |
| Fingerprint reader | None | | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X131e 3367 (Intel) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Top color | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|----------|-----------|---------------------|------------|----------------|------------|------------------|
| 3367-98G | Cel 1007U | 4GBx1 | 11.6" HD | 720p | 320G 7200 | TP 11a/b/g/n | WWAN upg | None | Black | None | BT | 6 | Win7 Pro64 | 02/13 |

| | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|---|
| Positioning Processor | <i>Entry ultraportable for excellent usability and reliability; one spindle</i> Intel® Celeron® 1007U processor (2 cores, 1.50GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1600MHz) | | | | | | | | | | Preloaded operating system²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Skype™ |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | |
| Optical SATA disk | None (use optional USB-based optical drive) <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable, Active Protection System™ | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | 11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Maximum external resolution: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz</i> | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | | | | | | | | | | |
| TrackPoint® | TrackPoint pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | |
| Touch pad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | |
| Dimensions ³ | <i>11.6W" (WxDxH):</i> 11.6" x 8.5" x 1.27"; 293.4mm x 216mm x 32.3mm | | | | | | | | | | |
| Weight ² | <i>6-cell:</i> from 3.92 lb (1.78kg) | | | | | | | | | | |
| Case color | Midnight black or Heatwave red (top); black bottom | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell, HW Authentication | | | | | | | | | | |
| Battery - life ¹⁰ | <i>6-cell (62.4Whr):</i> up to 8.5 hr | | | | | | | | | | |
| Chipset | Mobile Intel HM77 Express Chipset | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Ports | Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | |
| SIM card | None | | | | | | | | | | |
| Modem | None | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2 watt x 2 / monaural digital microphone, combo audio/mic jack | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | |
| Fingerprint reader | None | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | |
| | Supports ThinkVantage® technologies | | | | | | | | | | |
| | 65-watt AC Adapter EPEAT™ Gold rating (except Celeron models) ENERGY STAR® 6.0-compliant (except Celeron models) GREENGUARD® certified (except Celeron models) ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X131e 3372 (AMD) - TopSeller

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Top color | Finger print reader | Blue-tooth | Bat-tery cells | Preload (mm/yy) | Ann Date |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|----------|-----------|---------------------|------------|----------------|-----------------|----------|
| 3372-2KG | E2-1800 | 4GBx1 | 11.6" HD | 720p | 320G 7200 | TP 11a/b/g/n | WWAN upg | None | Red | None | BT | 6 | Pro 64 | 07/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**

| | | |
|--|---|---|
| Positioning Processor | <i>Entry ultraportable for excellent usability and reliability; one spindle</i> AMD Accelerated Processor E2-1800 (2 cores, 1.70GHz, 1MB L2 cache) , integrated AMD Radeon™ HD 7340 Graphics, integrated DDR3 memory controller (up to 1333MHz) | Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 Ready to install applications ¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none"> • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Symantec™ VIP • Windows Live™ Essentials |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, two 204-pin SO-DIMM sockets * System clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller | |
| Optical SATA disk | None (use optional USB-based optical drive) <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable, Active Protection System™ | |
| mSATA™ SSD | None | |
| Widescreen display | 11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | AMD Radeon HD 7340 graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Maximum external resolution:</i> 1920x1080 (VGA or HDMI) | |
| Keyboard TrackPoint® | 6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, Internet Scroll Bar ¹³ | |
| Touch pad ThinkLight™ | UltraNav™, buttonless touchpad below keyboard, multi-touch None | |
| Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰ | <i>11.6W" (WxDxH):</i> 11.6" x 8.5" x 1.27"; 293.4mm x 216mm x 32.3mm <i>6-cell:</i> from 3.92 lb (1.78kg) Midnight black or Heatwave red (top); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell, HW Authentication <i>6-cell (6.4Whr):</i> up to 8.5 hr | |
| Chipset Multicard reader ExpressCard Ports | AMD A68M FCH Chipset 4-in-1 reader (MMC, SD, SDHC, SDXC) None Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter Wireless WAN upgradable None None | |
| Bluetooth™ Ethernet Audio support | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Realtek® RTL8111F Gigabit Network Connection HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2 watt x 2 / monaural digital microphone, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole None None | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | |
| | | Supports ThinkVantage® technologies 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad X131e 3371 (AMD) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN /mSATA | SIM card | Top color | Finger print reader | Blue-tooth | Bat-tery cells | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|---------------------|----------------------------|----------|-----------|---------------------|------------|----------------|------------|------------------|
| 3371-8HG | E1-1200 | 4GBx1 | 11.6" HD | 720p | 320G 7200 | TP 11a/b/g/n | WWAN upg | None | Red | None | BT | 6 | Win7 Pro64 | 04/13 |

| | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|---|
| Positioning Processor | <i>Entry ultraportable for excellent usability and reliability; one spindle</i> AMD Accelerated Processor E1-1200 (2 cores, 1.40GHz, 1MB L2 cache) , integrated AMD Radeon™ HD 7310 Graphics, integrated DDR3 memory controller (up to 1066MHz) | | | | | | | | | | Preloaded operating system ²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Preloaded applications ⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Skype™ |
| Memory | 8GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, two 204-pin SO-DIMM sockets * System clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller | | | | | | | | | | |
| Optical SATA disk | None (use optional USB-based optical drive) <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm, upgradable, Active Protection System™ | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display | 11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | AMD Radeon HD 7310 graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Maximum external resolution: 1920x1080 (VGA or HDMI)</i> | | | | | | | | | | |
| Keyboard | 6-row, spill-resistant, multimedia Fn keys | | | | | | | | | | |
| TrackPoint® | TrackPoint pointing device, Internet Scroll Bar ¹³ | | | | | | | | | | |
| Touch pad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | |
| Dimensions ³ | <i>11.6W" (WxDxH):</i> 11.6" x 8.5" x 1.27"; 293.4mm x 216mm x 32.3mm | | | | | | | | | | |
| Weight ² | <i>6-cell:</i> from 3.92 lb (1.78kg) | | | | | | | | | | |
| Case color | Midnight black or Heatwave red (top); black bottom | | | | | | | | | | |
| Case material | Acrylonitrile-Butadiene-Styrene (ABS) plastic | | | | | | | | | | |
| Battery - type | Lithium Ion 6-cell, HW Authentication | | | | | | | | | | |
| Battery - life ¹⁰ | <i>6-cell (62.4Whr):</i> up to 8.5 hr | | | | | | | | | | |
| Chipset | AMD A68M FCH Chipset | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (MMC, SD, SDHC, SDXC) | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | |
| Ports | Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, HDMI), ethernet (RJ-45) | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | |
| SIM card | None | | | | | | | | | | |
| Modem | None | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter | | | | | | | | | | |
| Ethernet | Realtek® RTL8111F Gigabit Network Connection | | | | | | | | | | |
| Audio support | HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2 watt x 2 / monaural digital microphone, combo audio/mic jack | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | |
| Security chip | None | | | | | | | | | | |
| Fingerprint reader | None | | | | | | | | | | |
| Limited warranty ¹² | 1-year - depot repair service / service upgrades ²² available | | | | | | | | | | |
| | | | | | | | | | | | Supports ThinkVantage® technologies |
| | | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

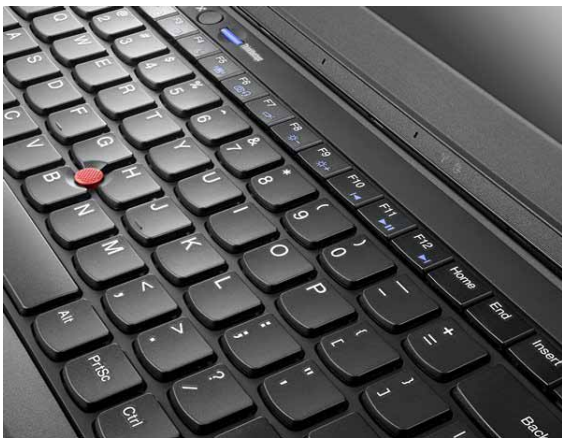
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Lenovo® ThinkPad X230



Lenovo ThinkPad X230



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Lenovo ThinkPad X230

ThinkPad X230 (2324)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ⁸ rpm | Optical in UltraBase Series 3 | ThinkPad Backlit key-board | PCIe Mini Card WLAN | Smart Card Reader | Finger print reader | Bat- tery cells | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|--------|-------------------------------|-------------------------------|----------------------------|---------------------|--------------------------|---------------------|-----------------|---------------------------|------------------|
| 2324-3WG | i5-3320M | 4GBx1 | 12.5" HD Prem | 720p | 500G 7200 | Optional | Opt | None | Intel 6205 ²⁸ | None | Fing BT | 6 vPro | G Pro 64 06/12 |
| 2324-3VG | i5-3320M | 4GBx1 | 12.5" HD Prem | 720p | 500G 7200 | DVD±RW | UltraB | None | Intel 6205 | None | Fing BT | 6 vPro | G Pro 64 06/12 |
| 2324-3QG | i5-3320M | 4GBx1 | 12.5" HD Prem | 720p | 320G 7200 | Optional | Opt | None | Intel 6205 | None | Fing BT | 6 vPro | G Pro 64 06/12 |
| 2324-3PG | i5-3320M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | DVD±RW | UltraB | None | Intel 6205 | None | Fing BT | 6 vPro | G Pro 64 06/12 |
| 2324-23G | i7-3520M | 4GBx1 | 12.5" HD Prem | No | 180G SSD | Optional | Opt | None | Intel 6300 ²⁸ | None | Fing BT | 9 vPro | G Pro 64 06/12 |
| 2324-22G | i5-3360M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | Optional | Opt | None | Intel 6205 | None | No | 6 vPro | G Pro 64 06/12 |
| 2324-5SG | i5-3320M | 4GBx1 | 12.5" HD Prem | 720p | 320G 7200 | Optional | Opt | None | Intel 6205 | None | Fing BT | 6 vPro | G Pro 64 07/12 |
| 2324-5RG | i5-3320M | 4GBx1 | 12.5" HD | 720p | 500G 7200 | DVD±RW | UltraB | None | Intel 6205 | None | Fing BT | 6 vPro | G Pro 64 07/12 |
| 2324-5QG | i5-3320M | 4GBx1 | 12.5" HD | 720p | 180G SSD | Optional | Opt | None | Intel 6205 | None | Fing BT | 6 vPro | G Pro 64 07/12 |
| 2324-5NG | i5-3320M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | Optional | Opt | None | Intel 6205 | None | No | 6 vPro | G Pro 64 07/12 |
| 2324-5PG | i5-3320M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | DVD±RW | UltraB | None | Intel 6205 | Gemplus | Fing BT | 6 vPro | G Pro 64 07/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|--|--|
| Positioning Processor | <i>An ultraportable for the executive on the move; one spindle</i> Intel® Core™ i5-3320M processor (dual-core, 2.60GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3360M processor (dual-core, 2.80GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2012 (30 days of virus definitions) • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • FingerPrint Software (fingerprint models) • ThinkVantage System Update • Adobe® Reader® • Microsoft® Office preloaded; purchase a product key to activate • Skype™ for Windows |
| Optical Ultrabay SATA disk | <i>Some:</i> DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> (Premium) 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, WideView (170° viewing) | |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery None <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | Supports ThinkVantage® technologies ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g |
| Chipset Ultrabase Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Some:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> Gemplus Smart Card Reader in ExpressCard slot Two USB 3.0, one powered USB 2.0 external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 Wireless WAN upgradable None None <i>Some:</i> Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

ThinkPad X230 (2324) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ³ rpm | Optical in UltraBase | ThinkPad Ultrabase Series 3 | Backlit key-board | PCIe Mini Card WLAN | Finger print reader | Blue-tooth | Bat-tery cells | Global (G) Intel AMT vPro (P) | Intel GMP (P) Preload | Ann date (mm/yy) | |
|------------|-----------|--------|--------------------|--------|-------------------------------|----------------------|-----------------------------|-------------------|--------------------------|---------------------|------------|----------------|-------------------------------|-----------------------|------------------|-------|
| 2324-67G | i5-3320M | 4GBx1 | 12.5" HD | No | 320G 7200 | Optional | Opt | None | Intel 2200 | None | No | 6 | No | No | G Win8 Pro64 | 10/12 |
| 2324-66G | i7-3520M | 4GBx1 | 12.5" HD | 720p | 180G SSD | Optional | Opt | None | Intel 6205 ²⁸ | Finger BT | BT | 6 | iAMT vPro | G Win8 Pro64 | 10/12 | |
| 2324-65G | i7-3520M | 4GBx1 | 12.5" HD | 720p | 500G 7200 | Optional | Opt | None | Intel 6205 | Finger BT | BT | 6 | iAMT vPro | G Win8 Pro64 | 10/12 | |
| 2324-64G | i5-3320M | 4GBx1 | 12.5" HD | 720p | 180G SSD | Optional | Opt | None | Intel 6205 | Finger BT | BT | 6 | iAMT vPro | G Win8 Pro64 | 10/12 | |
| 2324-63G | i5-3320M | 4GBx1 | 12.5" HD | 720p | 500G 7200 | Optional | Opt | None | Intel 6205 | Finger BT | BT | 6 | iAMT vPro | G Win8 Pro64 | 10/12 | |
| 2324-62G | i5-3320M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | Optional | Opt | None | Intel 6205 | Finger BT | BT | 6 | iAMT vPro | G Win8 Pro64 | 10/12 | |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i5-3320M processor (dual-core, 2.60GHz, 3MB Cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | | Preloaded operating system ²⁰ - Windows® 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | | Preloaded applications ⁵ (only some listed) |
| Optical Ultrabay SATA disk | Option for ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | | | | | | | | | | | <ul style="list-style-type: none"> - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • Microsoft® Office preloaded; purchase a product key to activate |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display Camera | 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | Supports ThinkVantage® technologies |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | ThinkPad Ultrabase Series 3 <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - Serial ATA Hard Drive 9.5mm Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 128GB SSD 6.0Gb/s 0A65629 • 180GB SSD 6.0Gb/s 0A65630 • 500GB Disk 7200 rpm 0A65632 |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase:</i> 4/6-cell: 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery None <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr, 0A36280):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | | | | | | | | | | | |
| Chipset Ultrabase Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Option:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0 external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 Wireless WAN upgradable None None <i>Some:</i> Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | Other features: <ul style="list-style-type: none"> • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X230 (2325) - Onsite

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ⁹ rpm | Optical in UltraB | ThinkPad Ultrab Series 3 | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN | SIM card | Smart Card Reader | Finger print reader | Bat- tery cells/vPro | Global (G) IntelGMP (P) | Ann Date (mm/yy) | |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|-------------------|---------------------|---------------------|----------|-------------------|---------------------|----------------------|-------------------------|------------------|-------|
| 2325-2UG | i5-3320M | 4GBx1 | 12.5" HD | 720p | 180G SSD | Optional | Opt | None | 6205 ²⁸ | upg | None | None | Fing | BT 6 | vPro G P | 06/12 | |
| 2325-2SG | i5-3320M | 4GBx1 | 12.5" HD | 720p | 500G 7200 | DVD±RW | UltraB | None | 6205 | upg | None | None | Fing | BT 6 | vPro G P | 06/12 | |
| 2325-2QG | i5-3320M | 4GBx1 | 12.5" HD Prem | 720p | 320G 7200 | Optional | Opt | None | 6205 | upg | None | None | Fing | BT 6 | vPro G P | 06/12 | |
| 2325-2EG | i7-3520M | 4GBx2 | 12.5" HD Prem | 720p | 180G SSD | Optional | Opt | Backlit | 6205 | Ericsson select | None | None | Fing | BT 9 | vPro | 06/12 | |
| 2325-2DG | i7-3520M | 4GBx1 | 12.5" HD Prem | 720p | 500G 7200 | DVD±RW | UltraB | Backlit | 6205 | Ericsson select | None | None | Fing | BT 9 | vPro | 06/12 | |
| 2325-2CG | i5-3320M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | Optional | Opt | None | 6205 | Ericsson select | None | Gemplus | Fing | BT 6 | vPro | 06/12 | |
| 2325-23G | i7-3520M | 4GBx1 | 12.5" HD Prem | No | 180G SSD | Optional | Opt | None | 6300 ²⁸ | upg | None | None | Fing | BT 9 | vPro G P | 06/12 | |
| 2325-22G | i5-3360M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | Optional | Opt | None | 6205 | upg | None | None | No | No | 6 | vPro G P | 06/12 |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--|---|---|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i5-3320M processor (dual-core, 2.60GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3360M processor (dual-core, 2.80GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2012 (30 days of virus definitions) • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Adobe® Reader® • Microsoft® Office preloaded; purchase a product key to activate • Skype™ for Windows |
| Optical Ultrabay SATA disk | <i>Some:</i> DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> (Premium) 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, WideView (170° viewing) | |
| Camera | <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase:</i> 4/6-cell: 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm 4-cell: from 2.96 lb (1.34kg); 6-cell: from 3.31 lb (1.50kg); 9-cell: from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery None 4-cell (28.8Whr): up to 4.6 hr; 6-cell (62.4Whr): up to 10.3 hr; 9-cell (93.6Whr): up to 15.5 hr; external battery (64Whr): up to 10.6 hr; 9-cell plus external battery: up to 26.1 hr | |
| Chipset Ultrabase Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Some:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> Gemplus Smart Card Reader in ExpressCard slot Two USB 3.0, one powered USB 2.0 external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | Supports ThinkVantage® technologies ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None <i>Some:</i> Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole | |
| Security Security chip Fingerprint reader | Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | International Warranty Service¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

ThinkPad X230 (2325) - Onsite - II

| Type-model | Processor | Memory | Widescreen display | Disk SATA GB ⁹ rpm | Optical in UltraB | ThinkPad Ultrab Series 3 | Backlit key-board | PCIe Mini Card WWAN | SIM card | Smart Card Reader | Finger-print reader | Bat-tery cells | Ext Battery cells | Intel AMT | Global (G) Intel vPro (P) | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|-------------------------------|-------------------|--------------------------|-------------------|---------------------|----------|-------------------|---------------------|----------------|-------------------|-----------|---------------------------|------------------|
| 2325-2GG | i5-3210M | 4GBx1 | 12.5" HD | 500G 7200 | Optional | Opt | Backlit | Ericsson select | None | None | Fing | 6 | No | None | No | 06/12 |
| 2325-2FG | i5-3210M | 4GBx1 | 12.5" HD | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson select | None | None | Fing | 6 | No | None | No | 06/12 |
| 2325-5VG | i5-3210M | 4GBx1 | 12.5" HD | 500G 7200 | Optional | Opt | Backlit upg | None | None | None | Fing | 6 | No | None | No | 07/12 |
| 2325-5UG | i5-3210M | 4GBx1 | 12.5" HD | 500G 7200 | Optional | Opt | Backlit | Ericsson select | None | None | Fing | 6 | 6 | None | No | 07/12 |
| 2325-5TG | i5-3320M | 4GBx1 | 12.5" HD Prem | 320G 7200 | DVD±RW | UltraB | None | upg | None | None | Fing | 6 | No | iAMT | vPro G P | 07/12 |
| 2325-3QG | i5-3320M | 4GBx1 | 12.5" HD Prem | 320G 7200 | Optional | Opt | None | upg | None | None | Fing | 6 | No | iAMT | vPro G P | 07/12 |
| 2325-5SG | i5-3320M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | None | upg | None | None | Fing | 6 | No | iAMT | vPro G P | 07/12 |
| 2325-5RG | i5-3320M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | None | upg | None | None | Fing | 6 | No | iAMT | vPro G P | 07/12 |
| 2325-5PG | i5-3320M | 4GBx1 | 12.5" HD | 320G 7200 | DVD±RW | UltraB | None | upg | None | Gemplus | Fing | 6 | No | iAMT | vPro G P | 07/12 |
| 2325-5NG | i5-3320M | 4GBx1 | 12.5" HD | 320G 7200 | Optional | Opt | None | upg | None | None | No | 6 | No | iAMT | vPro G P | 07/12 |

• Limited onsite service²⁴ 3-year limited warranty

| | | |
|---|---|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology | Preloaded operating system²⁰ - Genuine Windows [®] 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications¹⁴ (only some listed) • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Microsoft® Office preloaded; purchase a product key to activate • Skype™ for Windows |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | |
| Optical Ultrabay SATA disk | <i>Some:</i> DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Some:</i> 12.5" (317.5mm) HD (1366x768) TFT color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> (Premium) 12.5" (317.5mm) HD (1366x768) TFT color, anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, WideView (170° viewing) | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery <i>Some:</i> Slim external Lithium Ion 6-cell battery (ThinkPad Battery 19+, 0A36280) <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | |
| Chipset Ultrabase Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Some:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> Gemplus Smart Card Reader in ExpressCard slot Two USB 3.0, one powered USB 2.0 external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |
| Supports ThinkVantage® technologies | | |
| ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side | | |
| Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g | | |
| 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | |

See footnotes for more detailed information

ThinkPad X230 (2325) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Disk SATA GB ³ rpm | Optical in UltraBase | ThinkPad Ultrabase Series 3 | Backlit key-board | PCIe Mini Card WWAN | PCle SIM card | Battery cells | Ext Battery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|--|---|--------|--------------------|-------------------------------|----------------------|-----------------------------|-------------------|---------------------|---------------|---------------|--|-----------|------------|------------|------------------|
| 2325-7BG | i5-3210M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | Ericsson | selectable | 6 | 6 | None | No | Win7 Pro64 | 10/12 |
| 2325-7AG | i5-3210M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | WWAN upg | None | 6 | No | None | No | Win7 Pro64 | 10/12 |
| 2325-79G | i5-3210M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson | selectable | 6 | No | None | No | Win7 Pro64 | 10/12 |
| 2325-78G | i7-3520M | 4GBx2 | 12.5" HD Prem | 180G SSD | Optional | Opt | Backlit | Ericsson | selectable | 9 | No | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2325-77G | i7-3520M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson | selectable | 9 | No | iAMT | vPro | Win7 Pro64 | 10/12 |
| 2325-6GG | i5-3210M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | Ericsson | selectable | 6 | 6 | None | No | Win8 Pro64 | 10/12 |
| 2325-6FG | i5-3210M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | WWAN upg | None | 6 | No | None | No | Win8 Pro64 | 10/12 |
| 2325-6EG | i5-3210M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson | selectable | 6 | No | None | No | Win8 Pro64 | 10/12 |
| 2325-6DG | i7-3520M | 4GBx2 | 12.5" HD Prem | 180G SSD | Optional | Opt | Backlit | Ericsson | selectable | 9 | No | iAMT | vPro | Win8 Pro64 | 10/12 |
| 2325-6CG | i7-3520M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson | selectable | 9 | No | iAMT | vPro | Win8 Pro64 | 10/12 |
| 2325-7MG | i5-3320M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | WWAN upg | None | 6 | No | iAMT | vPro | Win7 Pro64 | 10/12 |
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows [®] 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | Preloaded applications⁵ (only some listed) | | | | |
| Optical Ultrabay SATA disk | Some: DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ All: removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | | | | | | | | | | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch | | | | |
| mSATA™ SSD | None | | | | | | | | | | - All models • Lenovo Solution Center • Password Manager • Microsoft® Office preloaded; purchase a product key to activate | | | | |
| Widescreen display Camera | (Premium) 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, WideView (170° viewing) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | Supports ThinkVantage® technologies | | | | |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery Some: Slim external Lithium Ion 6-cell battery (ThinkPad Battery 19+, 0A36280) <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr, 0A36280):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | | | | | | | | | | ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – Serial ATA Hard Drive 9.5mm Bay Adapter III 43N3412 Disks supported (some): • 128GB SSD 6.0Gb/s 0A65629 • 180GB SSD 6.0Gb/s 0A65630 • 500GB Disk 7200 rpm 0A65632 | | | | |
| Chipset Ultrabase Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset Some: ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | | | | | | | | | | Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Some: User selectable, contract required with service provider None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Some: Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X230 (2325) - Onsite (Windows 8) - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ^a rpm | Optical in UltraBase Series 3 | ThinkPad Backlit key-board | PCIe Mini Card WLAN | Finger print reader | Bat-tery Intel AMT | Global (G) Intel vPro (P) | Ann Date (mm/yy) | | | | |
|------------|-----------|--------|--------------------|--------|-------------------------------|-------------------------------|----------------------------|---------------------|--------------------------|--------------------|---------------------------|------------------|-----------|------------|------------|-------|
| 2325-67G | i5-3320M | 4GBx1 | 12.5" HD | No | 320G 7200 | Optional | Opt | None | Intel 2200 | None | No | No | G P | Win8 Pro64 | 10/12 | |
| 2325-66G | i7-3520M | 4GBx1 | 12.5" HD | 720p | 180G SSD | Optional | Opt | None | Intel 6205 ²⁸ | Finger | BT | 6 | iAMT vPro | G P | Win8 Pro64 | 10/12 |
| 2325-65G | i7-3520M | 4GBx1 | 12.5" HD | 720p | 500G 7200 | Optional | Opt | None | Intel 6205 | Finger | BT | 6 | iAMT vPro | G P | Win8 Pro64 | 10/12 |
| 2325-64G | i5-3320M | 4GBx1 | 12.5" HD | 720p | 180G SSD | Optional | Opt | None | Intel 6205 | Finger | BT | 6 | iAMT vPro | G P | Win8 Pro64 | 10/12 |
| 2325-63G | i5-3320M | 4GBx1 | 12.5" HD | 720p | 500G 7200 | Optional | Opt | None | Intel 6205 | Finger | BT | 6 | iAMT vPro | G P | Win8 Pro64 | 10/12 |
| 2325-62G | i5-3320M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | Optional | Opt | None | Intel 6205 | Finger | BT | 6 | iAMT vPro | G P | Win8 Pro64 | 10/12 |

• Part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i5-3320M processor (dual-core, 2.60GHz, 3MB Cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system ²⁰ - Windows® 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | Preloaded applications ⁵ (only some listed) |
| Optical Ultrabay SATA disk | Option for ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | | | | | | | | | | <ul style="list-style-type: none"> - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • Microsoft® Office preloaded; purchase a product key to activate |
| mSATA™ SSD | None | | | | | | | | | | |
| Widescreen display Camera | 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | Supports ThinkVantage® technologies |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase:</i> 4/6-cell: 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery None <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr, 0A36280):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | | | | | | | | | | ThinkPad Ultrabase Series 3 <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - Serial ATA Hard Drive 9.5mm Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 128GB SSD 6.0Gb/s 0A65629 • 180GB SSD 6.0Gb/s 0A65630 • 500GB Disk 7200 rpm 0A65632 |
| Chipset Ultrabase Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Option:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | | | | | | | | | | Other features: <ul style="list-style-type: none"> • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 Wireless WAN upgradable None None <i>Some:</i> Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant |
| Limited warranty ¹² | 3-years /1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad X230 (2325) - Onsite (Windows 8) - III

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Disk SATA GB ³ rpm | Optical in UltraBase | ThinkPad Ultrabase Series 3 | Backlit key-board | PCIe Mini Card WWAN | PCle SIM card | Battery cells | Ext Battery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|--------------------------------|---|--------|--------------------|-------------------------------|----------------------|-----------------------------|-------------------|---------------------|---------------|---------------|--|-----------|------------|------------|------------------|
| 2325-ALG | i5-3220M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | WWAN upg | None | 6 | No | iAMT | vPro | Win8 Pro64 | 03/13 |
| 2325-AKG | i5-3230M | 4GBx1 | 12.5" HD Prem | 180G SSD | Optional | Opt | Backlit | Ericsson | selectable | 6 | No | None | No | Win8 Pro64 | 03/13 |
| 2325-AJG | i5-3230M | 4GBx1 | 12.5" HD Prem | 180G SSD | Optional | Opt | Backlit | Ericsson | selectable | 6 | No | None | No | Win7 Pro64 | 03/13 |
| 2325-AHG | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | Ericsson | selectable | 6 | 6 | None | No | Win8 Pro64 | 03/13 |
| 2325-AGG | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | Ericsson | selectable | 6 | 6 | None | No | Win7 Pro64 | 03/13 |
| 2325-AFG | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | WWAN upg | None | 6 | No | None | No | Win8 Pro64 | 03/13 |
| 2325-AEG | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | WWAN upg | None | 6 | No | None | No | Win7 Pro64 | 03/13 |
| 2325-ADG | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson | selectable | 6 | No | None | No | Win8 Pro64 | 03/13 |
| 2325-ACG | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson | selectable | 6 | No | None | No | Win7 Pro64 | 03/13 |
| 2325-B3G | i5-3380M | 4GBx1 | 12.5" HD | 500G 7200 | Optional | Opt | Backlit | WWAN upg | None | 6 | No | iAMT | vPro | Win7 Pro64 | 05/13 |
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3380M processor (2 cores, 2.90GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • Microsoft® Office preloaded; purchase a product key to activate | | | | |
| Optical Ultrabay SATA disk | Some: DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ All: removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | | | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | | |
| Widescreen display | Some: 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: (Premium) 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, WideView (170° viewing) | | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | | |
| Keyboard TrackPoint® | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | | | | | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | Supports ThinkVantage® technologies | | | | |
| Dimensions ³ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm | | | | | | | | | | ThinkPad Ultrabase Series 3 | | | | |
| Weight ² | <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) | | | | | | | | | | • Provides desktop expansion and cable management for X230 and X230 Tablet | | | | |
| Case material | Display cover: Magnesium + PCABS; Bottom: Magnesium alloy | | | | | | | | | | • Easily connects to the bottom of the X230 or X230 Tablet for traveling | | | | |
| Standard Battery | Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery | | | | | | | | | | • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – Serial ATA Hard Drive 9.5mm Bay Adapter III 43N3412 | | | | |
| External Battery | Some: Slim external Lithium Ion 6-cell battery (ThinkPad Battery 19+, 0A36280) | | | | | | | | | | Disks supported (some): • 128GB SSD 6.0Gb/s 0A65629 • 180GB SSD 6.0Gb/s 0A65630 • 500GB Disk 7200 rpm 0A65632 | | | | |
| Battery - life ¹⁰ | <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr, 0A36280):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | | | | | | | | | | • Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g | | | | |
| Chipset | Mobile Intel QM77 Express Chipset | | | | | | | | | | | | | | |
| Ultrabase | Some: ThinkPad Ultrabase Series 3 (see right side) | | | | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (SD, SDHC, SDXC, MMC) | | | | | | | | | | | | | | |
| ExpressCard | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | | | | |
| Smart Card Read | None | | | | | | | | | | | | | | |
| Ports | Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | | | | | | | | | | | | | | |
| PCIe WWAN | Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | | |
| SIM card | Some: User selectable, contract required with service provider | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | | | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | | | | | | | | | | | | | | |
| Intel AMT | Some: Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | |

See footnotes for more detailed information

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ThinkPad X230 (2325) - Onsite (Windows 8) - IV

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Disk SATA GB ⁵ rpm | Optical in UltraBase Series 3 | ThinkPad Ultrabase | Backlit key-board | PCIe Mini Card WWAN | SIM card | Finger print reader | Bat- tery cells | Ext Battery cells | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|-------------------------------|-------------------------------|--------------------|-------------------|---------------------|----------|---------------------|-----------------|-------------------|-----------|------------|------------|------------------|
| 2325-BDG | i5-3320M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | upg | None | None | 6 | No | iAMT | vPro | Win8 Pro64 | 06/13 |
| 2325-BCG | i5-3320M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | upg | None | None | 6 | No | iAMT | vPro | Win7 Pro64 | 06/13 |
| 2325-BBG | i5-3230M | 4GBx1 | 12.5" HD Prem | 180G SSD | Optional | Opt | Backlit | Ericsson | select | None | 6 | No | No | No | Win8 Pro64 | 06/13 |
| 2325-BAG | i5-3230M | 4GBx1 | 12.5" HD Prem | 180G SSD | Optional | Opt | Backlit | Ericsson | select | None | 6 | No | No | No | Win7 Pro64 | 06/13 |
| 2325-B9G | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | Ericsson | select | None | 6 | No | No | No | Win8 Pro64 | 06/13 |
| 2325-B8G | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | Ericsson | select | None | 6 | 6 | No | No | Win7 Pro64 | 06/13 |
| 2325-B7G | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | upg | None | None | 6 | No | No | No | Win8 Pro64 | 06/13 |
| 2325-B6G | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | Optional | Opt | Backlit | upg | None | None | 6 | No | No | No | Win7 Pro64 | 06/13 |
| 2325-B5G | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson | select | None | 6 | No | No | No | Win8 Pro64 | 06/13 |
| 2325-B4G | i5-3230M | 4GBx1 | 12.5" HD Prem | 500G 7200 | DVD±RW | UltraB | Backlit | Ericsson | select | None | 6 | No | No | No | Win7 Pro64 | 06/13 |
| 2325-BHG | i5-3230M | 4GBx1 | 12.5" HD Prem | 256G SSD OPAL | Optional | Opt | Backlit | Ericsson | select | None | 6 | No | No | No | Win8 Pro64 | 06/13 |
| 2325-BGG | i5-3230M | 4GBx1 | 12.5" HD Prem | 256G SSD OPAL | Optional | Opt | Backlit | Ericsson | select | None | 6 | No | No | No | Win7 Pro64 | 06/13 |
| 2325-BFG | i7-3520M | 8GBx1 | 12.5" HD Prem | 256G SSD OPAL | Optional | Opt | Backlit | Ericsson | select | Finger | 9 | No | iAMT | vPro | Win7 Pro64 | 06/13 |
| 2325-BEG | i7-3520M | 8GBx1 | 12.5" HD Prem | 256G SSD OPAL | Optional | Opt | Backlit | Ericsson | select | Finger | 9 | No | iAMT | vPro | Win8 Pro64 | 06/13 |

| | | |
|--|--|---|
| Positioning Processor | <i>An ultraportable for the executive on the move; one spindle</i> Intel® Core™ i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | Preloaded applications⁵ (only some listed) |
| Optical Ultrabay SATA disk | <i>Some:</i> DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • Microsoft® Office preloaded; purchase a product key to activate |
| mSATA™ SSD | None | |
| Widescreen display Camera | (Premium) 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, WideView (170° viewing) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | Supports ThinkVantage® technologies |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery <i>Some:</i> Slim external Lithium Ion 6-cell battery (ThinkPad Battery 19+, 0A36280) <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr, 0A36280):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – Serial ATA Hard Drive 9.5mm Bay Adapter III 43N3412 Disks supported (some): • 128GB SSD 6.0Gb/s 0A65629 • 180GB SSD 6.0Gb/s 0A65630 • 500GB Disk 7200 rpm 0A65632 |
| Chipset Ultrabase Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Some:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 <i>Some:</i> Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | |

See footnotes for more detailed information

ThinkPad X230i (2320) - TopSeller

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Camera | Disk SATA GB ² rpm | Optical in UltraB | ThinkPad Ultrab Series 3 | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN | Finger print reader | Bat-tery Blue-tooth cells | Intel vPro | Pre-load | Ann date (mm/yy) |
|------------|-----------|--------|---------------------|--------|-------------------------------|-------------------|--------------------------|-------------------|--------------------------|---------------------|---------------------|---------------------------|------------|----------|------------------|
| 2320-2DG | i3-2370M | 4GBx1 | 12.5" HD | 720p | 320G 7200 | Opt | Opt | Backlit | Intel 6205 ²⁸ | upg | Fing BT | 6 | None | Pro 64 | 06/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i3-2370M processor (dual-core, 2.40GHz, 3MB Cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 | | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | | | |
| Optical Ultrabay SATA disk | Option for ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Access Connections™ • ThinkVantage Power Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Microsoft® Office preloaded; purchase a product key to activate • Skype™ for Windows | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | | |
| Widescreen display Camera | 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 3000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | Supports ThinkVantage® technologies | | | | |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery None <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | | | | | | | | | | ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side | | | | |
| Chipset Ultrabase Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Option:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0 external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | | | | | | | | | | Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X230i (2324)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad Ultrabase Series 3 | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN | Finger-print reader | Bat-tery cells | Intel vPro | Pre-load | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|--------|-------------------------------|----------------------|-----------------------------|-------------------|---------------------|---------------------|---------------------|----------------|------------|----------|------------------|
| 2324-97G | Cel 877 | 4GBx1 | 12.5" HD | 720p | 320G 7200 | Optional | Opt | Backlit | Intel 2200 | WWAN upg | Finger | 6 | No | Pro 64 | 03/13 |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Celeron® 877 processor (2 cores, 1.40GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1333MHz) | | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager | | | |
| Optical Ultrabay SATA disk | Option for ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2012 (30 days of virus definitions) • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Adobe® Reader® • Microsoft® Office preloaded; purchase a product key to activate • Skype™ for Windows | | | |
| mSATA™ SSD | None | | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Widescreen display | 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | ThinkPad Ultrabase Series 3 | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | • Provides desktop expansion and cable management for X230 and X230 Tablet | | | |
| Graphics | Intel HD Graphics in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side | | | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | | | | | | | | | | | Other features: | | | |
| TrackPoint® | TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | • Power button (front) | | | |
| Touchpad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | | • Security key lock, security keyhole | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | • Analog VGA DB-15 monitor port | | | |
| Dimensions ³ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm | | | | | | | | | | | • DisplayPort (supports single-link DVI-D via cable 45J7915) | | | |
| Weight ² | <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) | | | | | | | | | | | • Four USB 2.0 ports | | | |
| Case material | <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy | | | | | | | | | | | • Gigabit ethernet (RJ-45) port | | | |
| Standard Battery | Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery | | | | | | | | | | | • Microphone in and headphone out | | | |
| External Battery | None | | | | | | | | | | | • Requires 65W or 90W AC adapter | | | |
| Battery - life ¹⁰ | <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | | | | | | | | | | | • 1.39 lb; 630g | | | |
| Chipset | Mobile Intel QM77 Express Chipset | | | | | | | | | | | 65-watt AC Adapter | | | |
| Ultrabase | <i>Option:</i> ThinkPad Ultrabase Series 3 (see right side) | | | | | | | | | | | EPEAT™ Gold rating (except Celeron models) | | | |
| Multicard reader | 4-in-1 reader (SD, SDHC, SDXC, MMC) | | | | | | | | | | | ENERGY STAR® 5.0-compliant (except Celeron models) | | | |
| ExpressCard | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | GREENGUARD® certified (except Celeron models) | | | |
| Smart Card Read | None | | | | | | | | | | | ROHS-compliant | | | |
| Ports | Two USB 3.0, one powered USB 2.0 external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | | | | | | | | | | | International Warranty Service ¹⁷ | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| PCIe WLAN ⁴ | 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 | | | | | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | | | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | | | | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X230i (2324) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Wide-screen display | Disk SATA GB ⁵ rpm | Optical in UltraB | ThinkPad Ultrab Series 3 | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN | Finger print reader | Bat-tery cells | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|---------------------|-------------------------------|-------------------|--------------------------|-------------------|--------------------------|---------------------|---------------------|----------------|------------|------------|------------------|
| 2324-7PG | i3-3110M | 4GBx1 | 12.5" HD | 320G 7200 | Optional | Opt | Backlit | Intel 6205 ²⁸ | WWAN upg | Finger | 6 | None | Win7 Pro64 | 10/12 |
| 2324-6SG | i3-3110M | 4GBx1 | 12.5" HD | 320G 7200 | Optional | Opt | Backlit | Intel 6205 | WWAN upg | Finger | 6 | None | Win8 Pro64 | 10/12 |
| 2324-96G | i3-3120M | 4GBx1 | 12.5" HD | 320G 7200 | Optional | Opt | Backlit | Intel 6205 | WWAN upg | Finger | 6 | None | Win8 Pro64 | 03/13 |
| 2324-95G | i3-3120M | 4GBx1 | 12.5" HD | 320G 7200 | Optional | Opt | Backlit | Intel 6205 | WWAN upg | Finger | 6 | None | Win7 Pro64 | 03/13 |
| 2324-9GG | i3-3120M | 4GBx1 | 12.5" HD | 320G 7200 | Optional | Opt | Backlit | Intel 6205 | WWAN upg | None | 6 | None | Win8 Pro64 | 06/13 |
| 2324-9FG | i3-3120M | 4GBx1 | 12.5" HD | 320G 7200 | Optional | Opt | Backlit | Intel 6205 | WWAN upg | None | 6 | None | Win7 Pro64 | 06/13 |

• A depot repair service 3-year limited warranty

| | | | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology | | | | | | | | | | Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller | | | | | | | | | | Preloaded applications⁵ (only some listed) | | | |
| Optical Ultrabay SATA disk | Option for ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | | | | | | | | | | <ul style="list-style-type: none"> - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • Microsoft® Office preloaded; purchase a product key to activate | | | |
| mSATA™ SSD | None | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Widescreen display | 12.5" (317.5mm) HD (1366x768) TFT color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | |
| Keyboard | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass | | | | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless touchpad below keyboard, multi-touch | | | | | | | | | | | | | |
| ThinkLight™ | Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | | | | |
| Dimensions ³ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm | | | | | | | | | | | | | |
| Weight ² | <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) | | | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy | | | | | | | | | | | | | |
| Standard Battery | Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery | | | | | | | | | | | | | |
| External Battery | None | | | | | | | | | | | | | |
| Battery - life ¹⁰ | <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | | | | | | | | | | | | | |
| Chipset | Mobile Intel QM77 Express Chipset | | | | | | | | | | | | | |
| Ultrabase | <i>Option:</i> ThinkPad Ultrabase Series 3 (see right side) | | | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (SD, SDHC, SDXC, MMC) | | | | | | | | | | | | | |
| ExpressCard | One slot (ExpressCard/34, ExpressCard/54) | | | | | | | | | | | | | |
| Smart Card Read | None | | | | | | | | | | | | | |
| Ports | Two USB 3.0, one powered USB 2.0 external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 | | | | | | | | | | | | | |
| PCIe WWAN | Wireless WAN upgradable | | | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | | |
| Ethernet | Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 | | | | | | | | | | | | | |
| Intel AMT | None | | | | | | | | | | | | | |
| Audio support | High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | |
| Fingerprint reader | <i>Some:</i> AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |

See footnotes for more detailed information

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ThinkPad X230i (2325) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Disk SATA GB ⁵ rpm | Optical in UltraBase Series 3 | ThinkPad Ultrabay Slim | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN | SIM card | Battery cells | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|-------------------------------|-------------------------------|------------------------|-------------------|--------------------------|---------------------|----------|---------------|------------|------------|------------------|
| 2325-A9G | i3-3130M | 4GBx1 | 12.5" HD | 500G 7200 | Optional | Opt | Backlit | Intel 6205 ²⁸ | WWAN upg | None | 6 | None | Win7 Pro64 | 02/13 |
| 2325-A8G | i3-3120M | 4GBx1 | 12.5" HD | 500G 7200 | Optional | Opt | Backlit | Intel 6205 | WWAN upg | None | 6 | None | Win7 Pro64 | 02/13 |

| | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | An ultraportable for the executive on the move; one spindle Intel® Core™ i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology Intel Core i3-3130M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Hyper-Threading technology | | | | | | | | | | Preloaded operating system²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | Preloaded applications⁵ (only some listed) | | | |
| Optical Ultrabay SATA disk | Option for ThinkPad Ultrabay Slim devices in optional or standard ThinkPad Ultrabay Slim (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabay Slim | | | | | | | | | | <ul style="list-style-type: none"> - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support - All models • Lenovo Solution Center • Password Manager • Microsoft® Office preloaded; purchase a product key to activate | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | |
| Widescreen display | 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA) | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch Illuminates the keyboard to improve visibility in low-light conditions | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Dimensions ³ Weight ² Case material Standard Battery External Battery Battery - life ¹⁰ | <i>without UltraBase; 4/6-cell:</i> 12.0" x 8.13" x 0.75-1.05"; 305mm x 206.5mm x 19.0-26.6mm <i>4-cell:</i> from 2.96 lb (1.34kg); <i>6-cell:</i> from 3.31 lb (1.50kg); <i>9-cell:</i> from 3.67 lb (1.67kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Ion 4-cell, 6-cell, or 9-cell, HW Authentication; optional external battery as 2nd battery None <i>4-cell (28.8Whr):</i> up to 4.6 hr; <i>6-cell (62.4Whr):</i> up to 10.3 hr; <i>9-cell (93.6Whr):</i> up to 15.5 hr; <i>external battery (64Whr, OA36280):</i> up to 10.6 hr; <i>9-cell plus external battery:</i> up to 26.1 hr | | | | | | | | | | ThinkPad Ultrabay Slim <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - Serial ATA Hard Drive 9.5mm Bay Adapter III 43N3412 Disks supported (some): <ul style="list-style-type: none"> • 128GB SSD 6.0Gb/s 0A65629 • 180GB SSD 6.0Gb/s 0A65630 • 500GB Disk 7200 rpm 0A65632 | | | |
| Chipset Ultrabay Multicard reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset Option: ThinkPad Ultrabay Slim (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, Mini DisplayPort), ethernet (RJ-45) | | | | | | | | | | Other features: <ul style="list-style-type: none"> • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |

See footnotes for more detailed information

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Lenovo® ThinkPad X230 Tablet



Lenovo ThinkPad X230 Tablet



Lenovo ThinkPad X230 Tablet



Lenovo ThinkPad X230 Tablet



Lenovo ThinkPad X230 Tablet

ThinkPad X230 Tablet (3437)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ⁸ rpm | Optical in UltraB | ThinkPad Ultrab Series 3 | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN | Bat-tery cells vPro | Global (G) Intel GMP (P) | Pre-load | Ann Date (mm/yy) |
|------------|-----------|--------|-----------------------|--------|-------------------------------|-------------------|--------------------------|-------------------|--------------------------|---------------------|---------------------|--------------------------|----------|------------------|
| 3437-3LG | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 720p | 320G 7200 | Optional | Optional | None | Intel 6205 ²⁸ | WWAN upg | 6 vPro | G | Pro 64 | 06/12 |
| 3437-2YG | i7-3520M | 4GBx1 | 12.5" HD <i>Multi</i> | 720p | 500G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 06/12 |
| 3437-2WG | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 720p | 500G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 06/12 |
| 3437-2TG | i5-3320M | 4GBx1 | 12.5" HD <i>Out</i> | 720p | 320G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 06/12 |
| 3437-2SG | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 720p | 320G 7200 | DVD±RW | UltraBase | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 06/12 |
| 3437-2AG | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 720p | 320G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 06/12 |
| 3437-23G | i7-3520M | 4GBx1 | 12.5" HD <i>Multi</i> | 720p | 180G SSD | DVD±RW | UltraBase | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 06/12 |
| 3437-22G | i5-3320M | 4GBx1 | 12.5" HD <i>Out</i> | 720p | 320G 7200 | DVD±RW | UltraBase | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 06/12 |
| 3437-3KG | i7-3520M | 4GBx1 | 12.5" HD <i>Multi</i> | 720p | 128G SSD | Optional | Optional | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 07/12 |
| 3437-2ZG | i5-3320M | 4GBx1 | 12.5" HD <i>Out</i> | 720p | 128G SSD | Optional | Optional | None | Intel 6205 | WWAN upg | 6 vPro | G | Pro 64 | 07/12 |

• A depot repair service 3-year limited warranty

| | | |
|--|---|---|
| Positioning Processor | Convertible tablet ultraportable; one spindle Intel® Core™ i5-3320M processor (dual-core, 2.60GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2012 (30 days of virus definitions) • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Adobe® Reader® • Microsoft® Office preloaded; purchase a product key to activate • Skype™ for Windows |
| Optical Ultrabay SATA disk | <i>Some:</i> DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | |
| mSATA™ SSD | None | |
| Widescreen display | <i>Outdoor:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare display with scratch resistant Corning® Gorilla® Glass, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, MultiTouch screen supports pen & five-finger gesture <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotate and swivel hinge , power, reset, and rotation buttons on display bottom | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, Tap Zones, multi-touch None | |
| Dimensions ³ Weight ² Case material Battery - type Extended Battery Battery - life ¹⁰ | <i>without UltraBase; 3-cell:</i> 12.0" x 9.0" x 1.1-1.23"; 305mm x 228.7mm x 27-31.3mm <i>3-cell:</i> from 3.67 lb (1.66kg); <i>6-cell:</i> from 3.97 lb (1.80kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Polymer 3-cell or Li-Ion 6-cell, HW Authentication; optional external battery as 2nd battery None <i>3-cell (30Whr):</i> up to 4.7 hr; <i>6-cell (66Whr):</i> up to 9.9 hr; <i>external battery (64Whr):</i> up to 10.2 hr; <i>6-cell plus external battery:</i> up to 20.1 hr | Supports ThinkVantage® technologies ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g |
| Chipset Ultrabase Multicard Reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Some:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader (right base of display), used in tablet/notebook mode, LED indicator, Power On Authentication, supports the security chip | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | |

See footnotes for more detailed information

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ThinkPad X230 Tablet (3438) - Onsite

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Disk SATA GB ⁵ rpm | Optical in UltraBase | ThinkPad Ultrabase Series 3 | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN | SIM card | Battery cells | Global (G) Intel vPro | Ann (A) GMP (P) | Date (mm/yy) |
|--|---|--------|-----------------------|-------------------------------|----------------------|-----------------------------|-------------------|--------------------------|---------------------|------------|---|-----------------------|-----------------|--------------|
| 3438-3UG | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 320G 7200 | DVD±RW | UltraBase | None | Intel 6205 ²⁸ | WWAN upg | None | 6 | vPro | G P | 06/12 |
| 3438-3TG | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 320G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | None | 6 | vPro | G P | 06/12 |
| 3438-2BG | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 500G 7200 | Optional | Optional | Backlit | Intel 6205 | Ericsson | selectable | 6 | vPro | | 06/12 |
| 3438-2AG | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 180G SSD | Optional | Optional | Backlit | Intel 6205 | Ericsson | selectable | 6 | vPro | | 06/12 |
| 3438-27G | i5-3320M | 4GBx1 | 12.5" HD <i>Out</i> | 320G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | None | 6 | vPro | G P | 06/12 |
| 3438-26G | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 320G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | None | 6 | vPro | G P | 06/12 |
| 3438-25G | i7-3520M | 4GBx1 | 12.5" HD <i>Multi</i> | 500G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | None | 6 | vPro | G P | 06/12 |
| 3438-24G | i5-3320M | 4GBx1 | 12.5" HD <i>Multi</i> | 500G 7200 | Optional | Optional | None | Intel 6205 | WWAN upg | None | 6 | vPro | G P | 06/12 |
| 3438-23G | i7-3520M | 4GBx1 | 12.5" HD <i>Multi</i> | 180G SSD | DVD±RW | UltraBase | None | Intel 6205 | WWAN upg | None | 6 | vPro | G P | 06/12 |
| 3438-22G | i5-3320M | 4GBx1 | 12.5" HD <i>Out</i> | 320G 7200 | DVD±RW | UltraBase | None | Intel 6205 | WWAN upg | None | 6 | vPro | G P | 06/12 |
| Positioning Processor | <i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ i5-3320M processor (dual-core, 2.60GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ - Genuine Windows [®] 7 Professional 64 | | | |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery [™] • Password Manager | | | |
| Optical Ultrabay SATA disk | <i>Some:</i> DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System [™] <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Norton [™] Internet Security 2012 (30 days of virus definitions) • Access Connections [™] • ThinkVantage Power Manager • ThinkVantage Tools • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Adobe [®] Reader [®] • Microsoft [®] Office preloaded; purchase a product key to activate • Skype [™] for Windows | | | |
| mSATA [™] SSD | None | | | | | | | | | | | | | |
| Widescreen display | <i>Outdoor:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare display with scratch resistant Corning [®] Gorilla [®] Glass, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, MultiTouch screen supports pen & five-finger gesture <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotate and swivel hinge , power, reset, and rotation buttons on display bottom | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | | | | | | | | | | | | | |
| Keyboard TrackPoint [®] Touchpad ThinkLight [™] | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav [™] , buttonless touchpad below keyboard, Tap Zones, multi-touch None | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material Battery - type Extended Battery Battery - life ¹⁰ | <i>without UltraBase; 3-cell:</i> 12.0" x 9.0" x 1.1-1.23"; 305mm x 228.7mm x 27-31.3mm <i>3-cell:</i> from 3.67 lb (1.66kg); <i>6-cell:</i> from 3.97 lb (1.80kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Polymer 3-cell or Li-Ion 6-cell, HW Authentication; optional external battery as 2nd battery None <i>3-cell (30Whr):</i> up to 4.7 hr; <i>6-cell (66Whr):</i> up to 9.9 hr; <i>external battery (64Whr):</i> up to 10.2 hr; <i>6-cell plus external battery:</i> up to 20.1 hr | | | | | | | | | | Supports ThinkVantage [®] technologies | | | |
| Chipset Ultrabase Multicard Reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Some:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | | | | | | | | | | ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino [®] Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson [®] F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g | | | |
| SIM card Modem Bluetooth [™] Ethernet Intel AMT Audio support | <i>Some:</i> User selectable, contract required with service provider None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek [®] ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | | | | | | | | | | | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader (right base of display), used in tablet/notebook mode, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 65-watt AC Adapter EPEAT [™] Gold rating ENERGY STAR [®] 5.0-compliant GREENGUARD [®] certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | | |

See footnotes for more detailed information

ThinkPad X230 Tablet (3438) - Onsite - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Disk SATA GB ² rpm | Optical in UltraBase | ThinkPad Ultrabase Series 3 | Backlit key-board | PCIe Mini Card WLAN | PCIe Mini Card WWAN | Battery cells | Intel vPro | Global (G) GMP (P) | Ann Date (mm/yy) |
|------------|-----------|--------|-----------------------|-------------------------------|----------------------|-----------------------------|-------------------|--------------------------|---------------------|---------------|------------|--------------------|------------------|
| 3438-3SG | i5-3320M | 4GBx1 | 12.5" HD <i>Out</i> | 128G SSD | Optional | Optional | None | Intel 6205 ²⁸ | WWAN upg | 6 | vPro | G P | Pro 64 07/12 |
| 3438-2RG | i7-3520M | 4GBx1 | 12.5" HD <i>Multi</i> | 128G SSD | Optional | Optional | None | Intel 6205 | WWAN upg | 6 | vPro | G P | Pro 64 07/12 |

- Part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--|---|--|
| Positioning Processor | Convertible tablet ultraportable; one spindle Intel® Core™ i5-3320M processor (dual-core, 2.60GHz, 3MB Cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (dual-core, 2.90GHz, 4MB Cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology | Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 |
| Memory | 16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical Ultrabay SATA disk | Option for ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 (0A33932) <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3 | Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2012 (30 days of virus definitions) • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Adobe® Reader® • Microsoft® Office preloaded; purchase a product key to activate • Skype™ for Windows |
| mSATA™ SSD | None | |
| Widescreen display | <i>Outdoor:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare display with scratch resistant Corning® Gorilla® Glass, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, MultiTouch screen supports pen & five-finger gesture <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotate and swivel hinge , power, reset, and rotation buttons on display bottom | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via DisplayPort; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915) | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, Tap Zones, multi-touch None | |
| Dimensions ³ Weight ² Case material Battery - type Extended Battery Battery - life ¹⁰ | <i>without UltraBase; 3-cell:</i> 12.0" x 9.0" x 1.1-1.23"; 305mm x 228.7mm x 27-31.3mm <i>3-cell:</i> from 3.67 lb (1.66kg); <i>6-cell:</i> from 3.97 lb (1.80kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Li-Polymer 3-cell or Li-Ion 6-cell, HW Authentication; optional external battery as 2nd battery None <i>3-cell (30Whr):</i> up to 4.7 hr; <i>6-cell (66Whr):</i> up to 9.9 hr; <i>external battery (64Whr):</i> up to 10.2 hr; <i>6-cell plus external battery:</i> up to 20.1 hr | Supports ThinkVantage® technologies ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X230 and X230 Tablet • Easily connects to the bottom of the X230 or X230 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g |
| Chipset Ultrabase Multicard Reader ExpressCard Smart Card Read Ports | Mobile Intel QM77 Express Chipset <i>Option:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) None Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 4.0 wireless Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Realtek® ALC3202 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader (right base of display), used in tablet/notebook mode, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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Lenovo® ThinkPad X1 Carbon (1st Gen)



Lenovo ThinkPad X1 Carbon (1st Gen)



Lenovo ThinkPad X1 Carbon (1st Gen)



Lenovo ThinkPad X1 Carbon (1st Gen)



Lenovo ThinkPad X1 Carbon (1st Gen)



Lenovo ThinkPad X1 Carbon (1st Gen)

ThinkPad X1 Carbon (1st Gen) 3444 (TopSeller)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Blue-tooth | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|--------|-------------------------------|---------------------------|----------------------------|----------|---------------------|------------|-----------|------------|---------|------------------|
| 3444-57G | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S ²⁸ | Ericsson | Lenovo | Finger | BT | iAMT | vPro | Pro 64 | 08/12 |
| 3444-ATG | i5-3317U | 4GBx1 | 14.0" HD | 720p | 120G SSD | Intel 6205S | None | None | Finger | BT | None | None | Prem 64 | 10/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning Processor | <i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i> Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | | | | | | | | | | Preloaded operating system²⁰ <i>Some:</i> Genuine Windows® 7 Home Premium 64 <i>Some:</i> Genuine Windows 7 Professional 64 |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | | | | | | | | | | Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager |
| Optical | None | | | | | | | | | | Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Symantec™ VIP • Windows Live™ Essentials |
| SATA disk mSATA™ SSD | Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor None | | | | | | | | | | |
| Widescreen display | <i>Some:</i> 14.0" (355mm) HD (1366x768) TFT color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; <i>Max external resolution:</i> 2560x1600 (Mini-DisplayPort)@60Hz | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch None | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.0" x 8.9" x 0.31-0.74"; 331mm x 226mm x 8.0-18.8mm <i>Integrated battery:</i> from 3.0 lb (1.36kg) <i>Display cover:</i> Carbon Fiber; <i>Bottom:</i> Magnesium/Aluminum | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Integrated Lithium Polymer 4-cell RapidCharge battery <i>Integrated battery (45.8Whr):</i> up to 8.2 hr | | | | | | | | | | |
| Chipset Multicard reader ExpressCard Ports Monitor Cable | Mobile Intel QS77 Express Chipset 4-in-1 reader (SD, SDHC, SDXC, MMC) None One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort) None | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <i>Some:</i> Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required None Bluetooth 4.0 wireless None <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole, reset switch Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | 90-watt AC Adapter (RapidCharge) ThinkPad Roll Cage (bottom cover) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X1 Carbon (1st Gen) 3444 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | PCIe Mini Card SIM card | Finger print reader | Blue-tooth | Intel AMT | Intel vPro | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|--------|-------------------------------|---------------------------|---------------------------|-------------------------|---------------------|------------|-----------|------------|------------|------------------|
| 3444-AVG | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 120G SSD | Intel 6205S ²⁸ | None | None | Finger | BT | iAMT | vPro | Win8 Pro64 | 10/12 |
| 3444-6PG | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 120G SSD | Intel 6205S | None | None | Finger | BT | None | None | Win8 Pro64 | 10/12 |

- **Small and medium business (SMB) model(s), part of the WE TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

| | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Positioning | <i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i> | | | | | | | | | | | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate |
| Processor | Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology | | | | | | | | | | | |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | | | | | | | | | | | |
| Optical | None | | | | | | | | | | | |
| SATA disk | Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | |
| Widescreen display | 14.0" (355mm) HD+ (1600x900) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; <i>Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz</i> | | | | | | | | | | | |
| Keyboard | 6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ | | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | |
| Dimensions ³ | <i>14.0W" (WxDxH): 13.0" x 8.9" x 0.31-0.74"; 331mm x 226mm x 8.0-18.8mm</i> | | | | | | | | | | | |
| Weight ² | <i>Integrated battery: from 3.0 lb (1.36kg)</i> | | | | | | | | | | | |
| Case material | <i>Display cover: Carbon Fiber; Bottom: Magnesium/Aluminum</i> | | | | | | | | | | | |
| Battery - type | Integrated Lithium Polymer 4-cell RapidCharge battery | | | | | | | | | | | |
| Battery - life ¹⁰ | <i>Integrated battery (45.8Whr): up to 8.2 hr</i> | | | | | | | | | | | |
| Chipset | Mobile Intel QS77 Express Chipset | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (SD, SDHC, SDXC, MMC) | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | |
| Ports | One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort) | | | | | | | | | | | |
| Monitor Cable | None | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 | | | | | | | | | | | |
| PCIe WWAN | None | | | | | | | | | | | |
| SIM card | None | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | |
| Ethernet | None | | | | | | | | | | | |
| Intel AMT | <i>Some: Intel Active Management Technology (iAMT)</i> | | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole, reset switch | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | | | | | | | | | | | |

See footnotes for more detailed information

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ThinkPad X1 Carbon (1st Gen) 3448

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ² rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | Finger print reader | Blue-tooth | Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|--------|-------------------------------|---------------------------|----------------------------|----------|---------------------|------------|------------|--------------------|---------|------------------|
| 3448-34G | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S ²⁸ | None | None | Finger | BT | vPro | G | Pro 64 | 08/12 |
| 3448-35G | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Pro 64 | 08/12 |
| 3448-25G | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Pro 64 | 08/12 |
| 3448-24G | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Pro 64 | 08/12 |
| 3448-23G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Pro 64 | 08/12 |
| 3448-22G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Pro 64 | 08/12 |

• A depot repair service 3-year limited warranty

| | | |
|--------------------------------|--|--|
| Positioning Processor | <i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i> Intel® Core™ i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Symantec™ VIP • Windows Live™ Essentials |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | |
| Optical | None | |
| SATA disk | Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor | |
| mSATA™ SSD | None | |
| Widescreen display | 14.0" (355mm) HD+ (1600x900) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; <i>Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz</i> | |
| Keyboard | 6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ | |
| Touchpad | UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch | |
| ThinkLight™ | None | |
| Dimensions ³ | <i>14.0W" (WxDxH): 13.0" x 8.9" x 0.31-0.74"; 331mm x 226mm x 8.0-18.8mm</i> | |
| Weight ² | <i>Integrated battery: from 3.0 lb (1.36kg)</i> | |
| Case material | <i>Display cover: Carbon Fiber;</i> <i>Bottom: Magnesium/Aluminum</i> | |
| Battery - type | Integrated Lithium Polymer 4-cell RapidCharge battery | |
| Battery - life ¹⁰ | <i>Integrated battery (45.8Whr): up to 8.2 hr</i> | |
| Chipset | Mobile Intel QS77 Express Chipset | |
| Multicard reader | 4-in-1 reader (SD, SDHC, SDXC, MMC) | |
| ExpressCard | None | |
| Ports | One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort) | |
| Monitor Cable | None | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 | |
| PCIe WWAN | None | |
| SIM card | None | |
| Modem | None | |
| Bluetooth™ | Bluetooth 4.0 wireless | |
| Ethernet | None | |
| Intel AMT | Intel Active Management Technology (iAMT) | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole, reset switch | |
| Security chip | TrustedPlatform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |
| | | Supports ThinkVantage® technologies 90-watt AC Adapter (RapidCharge) ThinkPad Roll Cage (bottom cover) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad X1 Carbon (1st Gen) 3448 (Windows 8)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ² rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | Mini Card SIM card | Finger print reader | Blue-tooth | Global (G) Intel vPro | GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|--------|-------------------------------|---------------------------|----------------------------|--------------------|---------------------|------------|-----------------------|---------|------------|------------------|
| 3448-5DG | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S ²⁸ | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-5CG | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-5BG | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-5AG | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-59G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-58G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-AYG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-AXG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-AWG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-AVG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 10/12 |
| 3448-C4G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 02/13 |

• A depot repair service 3-year limited warranty

| | | |
|--|--|---|
| Positioning Processor | <i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i> Intel® Core™ i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit Preloaded applications⁵ (only some listed) |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap |
| Optical SATA disk mSATA™ SSD | None Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor None | - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch |
| Widescreen display Camera | 14.0" (355mm) HD+ (1600x900) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; <i>Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz</i> | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch None | |
| Dimensions ³ Weight ² Case material | <i>14.0W" (WxDxH):</i> 13.0" x 8.9" x 0.31-0.74"; 331mm x 226mm x 8.0-18.8mm <i>Integrated battery:</i> from 3.0 lb (1.36kg) <i>Display cover:</i> Carbon Fiber; <i>Bottom:</i> Magnesium/Aluminum | |
| Battery - type Battery - life ¹⁰ | Integrated Lithium Polymer 4-cell RapidCharge battery <i>Integrated battery (45.8Whr):</i> up to 8.2 hr | |
| Chipset Multicard reader ExpressCard Ports Monitor Cable | Mobile Intel QS77 Express Chipset 4-in-1 reader (SD, SDHC, SDXC, MMC) None One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort) None | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 None None None Bluetooth 4.0 wireless None Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole, reset switch Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | 90-watt AC Adapter (RapidCharge) ThinkPad Roll Cage (bottom cover) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades²² available | |

See footnotes for more detailed information

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ThinkPad X1 Carbon (1st Gen) 3448 (Windows 8) - MultiTouch

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ⁹ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | PCIe Mini Card SIM card | Finger print reader | Blue-tooth | Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|--------|-------------------------------|---------------------------|----------------------------|-------------------------|---------------------|------------|------------|--------------------|------------|------------------|
| 3448-8SG | i5-3427U | 4GBx1 | 14.0" HD+ Multi | 720p | 240G FDE SSD | Intel 6205S ²⁸ | None | None | Finger | BT | vPro | G | Win8 Pro64 | 12/12 |
| 3448-8RG | i5-3427U | 4GBx1 | 14.0" HD+ Multi | 720p | 180G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 12/12 |
| 3448-7NG | i5-3427U | 4GBx1 | 14.0" HD+ Multi | 720p | 240G FDE SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 12/12 |
| 3448-7MG | i5-3427U | 4GBx1 | 14.0" HD+ Multi | 720p | 180G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 12/12 |
| 3448-C8G | i7-3667U | 8GBx1 | 14.0" HD+ Multi | 720p | 180G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 02/13 |
| 3448-C7G | i7-3667U | 8GBx1 | 14.0" HD+ Multi | 720p | 240G FDE SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 02/13 |
| 3448-C6G | i7-3667U | 8GBx1 | 14.0" HD+ Multi | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 02/13 |
| 3448-C5G | i7-3667U | 8GBx1 | 14.0" HD+ Multi | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | vPro | G | Win8 Pro64 | 02/13 |

• A depot repair service 3-year limited warranty

| | | |
|--------------------------------|--|--|
| Positioning Processor | <i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i> Intel® Core™ i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | Preloaded operating system²⁰ - Windows® 8 Pro 64-bit Preloaded applications⁵ (only some listed) |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | <ul style="list-style-type: none"> - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) |
| Optical | None | |
| SATA disk | Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor | |
| mSATA™ SSD | None | |
| Widescreen display | 14.0" (355mm) HD+ (1600x900) TFT color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 400:1 contrast ratio, MultiTouch screen supports ten-finger gesture | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; <i>Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz</i> | |
| Keyboard | 6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ | |
| Touchpad | UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch | |
| ThinkLight™ | None | |
| Dimensions ³ | <i>14.0W" (WxDxH):</i> 13.0" x 8.9" x 0.39-0.82"; 331mm x 226mm x 10.0-20.8mm | |
| Weight ² | <i>Integrated battery:</i> from 3.4 lb (1.54kg) | |
| Case material | <i>Display cover:</i> Carbon Fiber; <i>Bottom:</i> Magnesium/Aluminum | |
| Battery - type | Integrated Lithium Polymer 4-cell RapidCharge battery | |
| Battery - life ¹⁰ | <i>Integrated battery (45.8Whr):</i> up to 8.2 hr | |
| Chipset | Mobile Intel QS77 Express Chipset | |
| Multicard reader | 4-in-1 reader (SD, SDHC, SDXC, MMC) | |
| ExpressCard | None | |
| Ports | One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort) | |
| Monitor Cable | None | |
| PCIe Mini Card | Two PCI Express Mini Card slots | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 | |
| PCIe WWAN | None | |
| SIM card | None | |
| Modem | None | |
| Bluetooth™ | Bluetooth 4.0 wireless | |
| Ethernet | None | |
| Intel AMT | Intel Active Management Technology (iAMT) | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole, reset switch | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | |
| Limited warranty ¹² | 3-years/1-yr battery - depot repair service / service upgrades ²² available | Supports ThinkVantage® technologies 90-watt AC Adapter (RapidCharge) ThinkPad Roll Cage (bottom cover) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² |

See footnotes for more detailed information

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ThinkPad X1 Carbon (1st Gen) 3460 (Onsite)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ² rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Mini Card SIM card | Mini DP to VGA Cable | USB 2.0 Ethernet Adapter | Intel AMT | Intel vPro | Global (G) GMP (P) | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|--------|-------------------------------|---------------------------|---------------------------|--------------------|----------------------|--------------------------|-----------|------------|--------------------|------------------|
| 3460-35G | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S ²⁸ | None | None | None | None | iAMT | vPro | G P | Pro 64 08/12 |
| 3460-34G | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | None | None | iAMT | vPro | G P | Pro 64 08/12 |
| 3460-25G | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | None | None | iAMT | vPro | G P | Pro 64 08/12 |
| 3460-24G | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | None | None | iAMT | vPro | G P | Pro 64 08/12 |
| 3460-23G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | None | None | iAMT | vPro | G P | Pro 64 08/12 |
| 3460-22G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | None | None | iAMT | vPro | G P | Pro 64 08/12 |
| 3460-B6G | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | mDP-VGA | Ethernet | None | No | | Pro 64 11/12 |
| 3460-B5G | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | mDP-VGA | Ethernet | None | No | | Pro 64 11/12 |
| 3460-B4G | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | Ericsson | selectable | mDP-VGA | Ethernet | None | No | | Pro 64 11/12 |
| 3460-B3G | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | Ericsson | selectable | mDP-VGA | Ethernet | None | No | | Pro 64 11/12 |
| 3460-CZG | i5-3337U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | Ericsson | selectable | mDP-VGA | Ethernet | None | No | | Pro 64 03/13 |
| 3460-CYG | i5-3337U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | mDP-VGA | Ethernet | None | No | | Pro 64 03/13 |
| 3460-CXG | i5-3337U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | mDP-VGA | Ethernet | None | No | | Pro 64 03/13 |
| 3460-CWG | i5-3337U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | Ericsson | selectable | mDP-VGA | Ethernet | None | No | | Pro 64 03/13 |

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

| | | |
|--|---|--|
| Positioning Processor | <p><i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i></p> <p>Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology</p> <p>Intel Core i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology</p> <p>Intel Core i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology</p> <p>Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p> | <p>Preloaded operating system²⁰ Genuine Windows® 7 Professional 64</p> <p>Ready to install applications¹⁴ (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager <p>Preloaded applications¹⁴ (only some listed)</p> <ul style="list-style-type: none"> • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Symantec™ VIP • Windows Live™ Essentials |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | |
| Optical SATA disk mSATA™ SSD | None Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor None | |
| Widescreen display Camera | <p>14.0" (355mm) HD+ (1600x900) TFT color, anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio</p> <p>HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus</p> | |
| Graphics | <p>Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; <i>Max external resolution: 2560x1600 (Mini-DisplayPort) @60Hz</i></p> | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | <p>6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys</p> <p>TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³</p> <p>UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch</p> <p>None</p> | |
| Dimensions ³ Weight ² Case material | <p><i>14.0W" (WxDxH):</i> 13.0" x 8.9" x 0.31-0.74"; 331mm x 226mm x 8.0-18.8mm</p> <p><i>Integrated battery:</i> from 3.0 lb (1.36kg)</p> <p><i>Display cover:</i> Carbon Fiber; <i>Bottom:</i> Magnesium/Aluminum</p> | |
| Battery - type Battery - life ¹⁰ | <p>Integrated Lithium Polymer 4-cell RapidCharge battery</p> <p><i>Integrated battery (45.8Whr):</i> up to 8.2 hr</p> | |
| Chipset Multicard reader ExpressCard Ports Monitor Cable | <p>Mobile Intel QS77 Express Chipset</p> <p>4-in-1 reader (SD, SDHC, SDXC, MMC)</p> <p>None</p> <p>One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort)</p> <p><i>Some:</i> Mini DisplayPort to VGA Monitor Cable (0A36536)</p> | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | <p>Two PCI Express Mini Card slots</p> <p>11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2</p> <p><i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS</p> | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <p><i>Some:</i> User selectable, contract required with service provider</p> <p>None</p> <p>Bluetooth 4.0 wireless</p> <p><i>Some:</i> Lenovo USB 2.0 Ethernet Adapter</p> <p><i>Some:</i> Intel Active Management Technology (iAMT)</p> <p>HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack</p> | Supports ThinkVantage® technologies |
| Security Security chip Fingerprint reader | <p>Power-on password, hard disk password, supervisor password, security keyhole, reset switch</p> <p>Trusted Platform Module, TCG 1.2-compliant</p> <p>AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip</p> | <p>90-watt AC Adapter (RapidCharge)</p> <p>ThinkPad Roll Cage (bottom cover)</p> <p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>ROHS-compliant</p> <p>International Warranty Service¹⁷</p> <p>24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p> |
| Limited warranty ¹² | <p>3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available</p> | |

See footnotes for more detailed information

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ThinkPad X1 Carbon (1st Gen) 3460 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ⁵ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Card SIM card | Finger print reader | Blue-tooth | Intel AMT | Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|--------------------------------|---|--------|--------------------|--------|-------------------------------|---------------------------|---------------------------|---------------|---------------------|------------|-----------|------------|---|------------|------------------|
| 3460-8XG | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S ²⁸ | Ericsson | selectable | Finger | BT | iAMT | vPro | | Win7 Pro64 | 10/12 |
| 3460-7XG | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | None | No | | Win7 Pro64 | 10/12 |
| 3460-4KG | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | None | No | | Win8 Pro64 | 10/12 |
| 3460-5CG | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-5DG | i7-3667U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-5BG | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-5AG | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-59G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-58G | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-AYG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-AXG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-AWG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 256G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-AVG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 128G SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 10/12 |
| 3460-8YG | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 120G SSD | Intel 6205S | None | None | Finger | BT | None | No | | Win8 Pro64 | 10/12 |
| 3460-82G | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Finger | BT | iAMT | vPro | | Win7 Pro64 | 10/12 |
| 3460-7ZG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Finger | BT | iAMT | vPro | | Win7 Pro64 | 10/12 |
| 3460-7YG | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 120G SSD | Intel 6205S | None | None | Finger | BT | None | No | | Win7 Pro64 | 10/12 |
| 3460-7UG | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Finger | BT | iAMT | vPro | | Win7 Pro64 | 10/12 |
| 3460-5PG | i5-3317U | 4GBx1 | 14.0" HD+ | 720p | 120G SSD | Intel 6205S | None | None | Finger | BT | None | No | | Win8 Pro64 | 10/12 |
| 3460-4MG | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Finger | BT | iAMT | vPro | | Win8 Pro64 | 10/12 |
| 3460-4LG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Finger | BT | iAMT | vPro | | Win8 Pro64 | 10/12 |
| 3460-CBG | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Intel 6205S | None | None | Finger | BT | iAMT | vPro | G P | Win8 Pro64 | 02/13 |
| Positioning Processor | <p><i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i></p> <p>Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology</p> <p>Intel Core i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology</p> <p>Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p> | | | | | | | | | | | | <p>Preloaded operating system²⁰</p> <ul style="list-style-type: none"> - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit | | |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | | | | | | | | | | | | <p>Preloaded applications⁵ (only some listed)</p> <ul style="list-style-type: none"> - Windows 7 models <ul style="list-style-type: none"> • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models <ul style="list-style-type: none"> • Lenovo Solution Center • Password Manager • ThinkVantage System Update • FingerPrint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate | | |
| Optical | None | | | | | | | | | | | | | | |
| SATA disk | Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor | | | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | | | |
| Widescreen display | <p><i>Some: 14.0" (355mm) HD (1366x768) TFT color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio</i></p> <p><i>Some: 14.0" (355mm) HD+ (1600x900) TFT color, anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio</i></p> | | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | | |
| Graphics | <p>Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display;</p> <p><i>Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz</i></p> | | | | | | | | | | | | | | |
| Keyboard | 6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys | | | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ | | | | | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch | | | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.0" x 8.9" x 0.31-0.74"; 331mm x 226mm x 8.0-18.8mm | | | | | | | | | | | | | | |
| Weight ² | <i>Integrated battery:</i> from 3.0 lb (1.36kg) | | | | | | | | | | | | | | |
| Case material | <p><i>Display cover:</i> Carbon Fiber;</p> <p><i>Bottom:</i> Magnesium/Aluminum</p> | | | | | | | | | | | | | | |
| Battery - type | Integrated Lithium Polymer 4-cell RapidCharge battery | | | | | | | | | | | | | | |
| Battery - life ¹⁰ | <i>Integrated battery (45.8Whr):</i> up to 8.2 hr | | | | | | | | | | | | | | |
| Chipset | Mobile Intel QS77 Express Chipset | | | | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (SD, SDHC, SDXC, MMC) | | | | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | | | | |
| Ports | One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort) | | | | | | | | | | | | | | |
| Monitor Cable | None | | | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 | | | | | | | | | | | | | | |
| PCIe WWAN | <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | | | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | | | |
| Ethernet | None | | | | | | | | | | | | | | |
| Intel AMT | <i>Some:</i> Intel Active Management Technology (iAMT) | | | | | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole, reset switch | | | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | | | |
| Limited warranty ¹² | <p>3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available</p> | | | | | | | | | | | | <p>Supports ThinkVantage® technologies</p> <p>90-watt AC Adapter (RapidCharge)</p> <p>ThinkPad Roll Cage (bottom cover)</p> <p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>ROHS-compliant</p> <p>International Warranty Service¹⁷</p> <p>24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p> | | |

See footnotes for more detailed information

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ThinkPad X1 Carbon (1st Gen) 3460 (Onsite) - Windows 8 - II

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ³ rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/ mSATA | SIM card | USB 2.0 Ethernet Adapter | Intel AMT | Global (G) Intel vPro (P) | Preload | Ann Date (mm/yy) |
|--------------------------------|---|--------|--------------------|--------|-------------------------------|---------------------------|----------------------------|------------|--------------------------|---|---------------------------|------------|------------------|
| 3460-CVG | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S ²⁸ | None | None | Ethernet | iAMT | vPro No | Win8 Pro64 | 03/13 |
| 3460-CUG | i5-3427U | 4GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | None | None | Ethernet | iAMT | vPro No | Win7 Pro64 | 03/13 |
| 3460-CSG | i5-3337U | 4GBx1 | 14.0" HD+ | 720p | 120G SSD | Intel 6205S | None | None | Ethernet | None | No | Win8 64 | 03/13 |
| 3460-CRG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Intel 6205S | None | None | Ethernet | iAMT | vPro No | Win8 64 | 03/13 |
| 3460-CQG | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | None | None | Ethernet | iAMT | vPro No | Win8 64 | 03/13 |
| 3460-CPG | i5-3337U | 4GBx1 | 14.0" HD+ | 720p | 120G SSD | Intel 6205S | None | None | Ethernet | None | No | Win8 Pro64 | 03/13 |
| 3460-CNG | i5-3337U | 4GBx1 | 14.0" HD+ | 720p | 120G SSD | Intel 6205S | None | None | Ethernet | None | No | Win7 Pro64 | 03/13 |
| 3460-CMG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro No | Win8 Pro64 | 03/13 |
| 3460-CLG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 240G FDE SSD | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro No | Win7 Pro64 | 03/13 |
| 3460-CKG | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro No | Win8 Pro64 | 03/13 |
| 3460-CJG | i5-3427U | 8GBx1 | 14.0" HD+ | 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro No | Win7 Pro64 | 03/13 |
| 3460-DPG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 256G SSD OPAL | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro No | Win8 Pro64 | 06/13 |
| 3460-DNG | i7-3667U | 8GBx1 | 14.0" HD+ | 720p | 256G SSD OPAL | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro No | Win7 Pro64 | 06/13 |
| Positioning Processor | <i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i> Intel® Core™ i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology | | | | | | | | | | | | |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | | | | | | | | | | | | |
| Optical | None | | | | | | | | | | | | |
| SATA disk | Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor | | | | | | | | | | | | |
| mSATA™ SSD | None | | | | | | | | | | | | |
| Widescreen display | <i>Some: 14.0" (355mm) HD (1366x768) TFT color</i> , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some: 14.0" (355mm) HD+ (1600x900) TFT color</i> , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | |
| Graphics | Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; <i>Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz</i> | | | | | | | | | | | | |
| Keyboard | 6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys | | | | | | | | | | | | |
| TrackPoint® | TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ | | | | | | | | | | | | |
| Touchpad | UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch | | | | | | | | | | | | |
| ThinkLight™ | None | | | | | | | | | | | | |
| Dimensions ³ | 14.0W" (WxDxH): 13.0" x 8.9" x 0.31-0.74"; 331mm x 226mm x 8.0-18.8mm | | | | | | | | | | | | |
| Weight ² | Integrated battery: from 3.0 lb (1.36kg) | | | | | | | | | | | | |
| Case material | <i>Display cover:</i> Carbon Fiber; <i>Bottom:</i> Magnesium/Aluminum | | | | | | | | | | | | |
| Battery - type | Integrated Lithium Polymer 4-cell RapidCharge battery | | | | | | | | | | | | |
| Battery - life ¹⁰ | Integrated battery (45.8Whr): up to 8.2 hr | | | | | | | | | | | | |
| Chipset | Mobile Intel QS77 Express Chipset | | | | | | | | | | | | |
| Multicard reader | 4-in-1 reader (SD, SDHC, SDXC, MMC) | | | | | | | | | | | | |
| ExpressCard | None | | | | | | | | | | | | |
| Ports | One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort) | | | | | | | | | | | | |
| Monitor Cable | None | | | | | | | | | | | | |
| PCIe Mini Card | Two PCI Express Mini Card slots | | | | | | | | | | | | |
| PCIe WLAN ⁴ | 11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 | | | | | | | | | | | | |
| PCIe WWAN | <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | |
| SIM card | <i>Some:</i> User selectable, contract required with service provider | | | | | | | | | | | | |
| Modem | None | | | | | | | | | | | | |
| Bluetooth™ | Bluetooth 4.0 wireless | | | | | | | | | | | | |
| Ethernet | Lenovo USB 2.0 Ethernet Adapter | | | | | | | | | | | | |
| Intel AMT | <i>Some:</i> Intel Active Management Technology (iAMT) | | | | | | | | | | | | |
| Audio support | HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack | | | | | | | | | | | | |
| Security | Power-on password, hard disk password, supervisor password, security keyhole, reset switch | | | | | | | | | | | | |
| Security chip | Trusted Platform Module, TCG 1.2-compliant | | | | | | | | | | | | |
| Fingerprint reader | AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | | | |
| | | | | | | | | | | Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit - <i>Some:</i> Windows 8 Pro 64-bit | | | |
| | | | | | | | | | | Preloaded applications⁵ (only some listed) - Windows 7 models • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate | | | |
| | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| | | | | | | | | | | 90-watt AC Adapter (RapidCharge) ThinkPad Roll Cage (bottom cover) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |

See footnotes for more detailed information

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ThinkPad X1 Carbon (1st Gen) 3460 (Onsite) - Win 8 (MultiTouch)

Product Specifications Reference (PSREF)

| Type-model | Processor | Memory | Widescreen display | Camera | Disk SATA GB ^s rpm | PCIe Mini Card WLAN | PCIe Mini Card WWAN/mSATA | Mini Card SIM card | USB 2.0 Ethernet Adapter | Intel AMT | Intel vPro | Global (G) GMP (P) | Preload | Ann Date (mm/yy) |
|------------|-----------|--------|--------------------|------------|-------------------------------|---------------------------|---------------------------|--------------------|--------------------------|-----------|------------|--------------------|---------|------------------|
| 3460-ATG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 256G SSD | Intel 6205S ²⁸ | Ericsson | selectable | None | iAMT | vPro | Win7 Pro64 | 12/12 | |
| 3460-ASG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 256G SSD | Intel 6205S | Ericsson | selectable | None | iAMT | vPro | Win8 Pro64 | 12/12 | |
| 3460-ARG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | Ericsson | selectable | None | iAMT | vPro | Win7 Pro64 | 12/12 | |
| 3460-AQG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | Ericsson | selectable | None | iAMT | vPro | Win8 Pro64 | 12/12 | |
| 3460-APG | i5-3427U | 4GBx1 | 14.0" HD+ | Multi 720p | 180G SSD | Intel 6205S | Ericsson | selectable | None | iAMT | vPro | Win7 Pro64 | 12/12 | |
| 3460-ANG | i5-3427U | 4GBx1 | 14.0" HD+ | Multi 720p | 180G SSD | Intel 6205S | Ericsson | selectable | None | iAMT | vPro | Win8 Pro64 | 12/12 | |
| 3460-AMG | i5-3427U | 4GBx1 | 14.0" HD+ | Multi 720p | 180G SSD | Intel 6205S | None | None | None | iAMT | vPro | G P Win8 Pro64 | 12/12 | |
| 3460-ALG | i5-3427U | 4GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | None | None | None | iAMT | vPro | G P Win8 Pro64 | 12/12 | |
| 3460-9SG | i5-3427U | 4GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | None | None | None | iAMT | vPro | G P Win8 Pro64 | 12/12 | |
| 3460-9RG | i5-3427U | 4GBx1 | 14.0" HD+ | Multi 720p | 180G SSD | Intel 6205S | None | None | None | iAMT | vPro | G P Win8 Pro64 | 12/12 | |
| 3460-CGG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 256G SSD | Intel 6205S | None | None | None | iAMT | vPro | G P Win8 Pro64 | 02/13 | |
| 3460-CEG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | None | None | None | iAMT | vPro | G P Win8 Pro64 | 02/13 | |
| 3460-CDG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 180G SSD | Intel 6205S | None | None | None | iAMT | vPro | G P Win8 Pro64 | 02/13 | |
| 3460-CCG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | None | None | None | iAMT | vPro | G P Win8 Pro64 | 02/13 | |
| 3460-D7G | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | None | None | Ethernet | iAMT | vPro | Win8 64 | 03/13 | |
| 3460-D6G | i5-3337U | 4GBx1 | 14.0" HD+ | Multi 720p | 180G SSD | Intel 6205S | None | None | Ethernet | None | No | Win8 64 | 03/13 | |
| 3460-D5G | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro | Win8 Pro64 | 03/13 | |
| 3460-D4G | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 240G FDE SSD | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro | Win7 Pro64 | 03/13 | |
| 3460-D3G | i5-3337U | 4GBx1 | 14.0" HD+ | Multi 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Ethernet | None | No | Win8 Pro64 | 03/13 | |
| 3460-D2G | i5-3337U | 4GBx1 | 14.0" HD+ | Multi 720p | 180G SSD | Intel 6205S | Ericsson | selectable | Ethernet | None | No | Win7 Pro64 | 03/13 | |
| 3460-DRG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 256G SSD OPAL | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro | Win8 Pro64 | 06/13 | |
| 3460-DQG | i7-3667U | 8GBx1 | 14.0" HD+ | Multi 720p | 256G SSD OPAL | Intel 6205S | Ericsson | selectable | Ethernet | iAMT | vPro | Win7 Pro64 | 06/13 | |

| | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Positioning Processor | <p><i>Ultralight, durable, secure, and stylish Ultrabook™; one spindle</i></p> <p>Intel® Core™ i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p> | | | | | | | | | | <p>Preloaded operating system²⁰</p> <ul style="list-style-type: none"> - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit | | | |
| Memory | 4GB or 8GB / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets | | | | | | | | | | <p>Preloaded applications⁵ (only some listed)</p> <ul style="list-style-type: none"> - Windows 7 models <ul style="list-style-type: none"> • Lenovo® Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • ThinkVantage Power Manager • Lenovo SimpleTap - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo QuickLaunch - All models <ul style="list-style-type: none"> • Lenovo Solution Center • Password Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo Cloud Storage by SugarSync • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) | | | |
| Optical SATA disk mSATA™ SSD | None Solid State Drive (SSD) / SATA 6.0Gb/s, Small Form Factor None | | | | | | | | | | | | | |
| Widescreen display | 14.0" (355mm) HD+ (1600x900) TFT color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 400:1 contrast ratio, MultiTouch screen supports ten-finger gesture | | | | | | | | | | | | | |
| Camera | HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus | | | | | | | | | | | | | |
| Graphics | <p>Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; <i>Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz</i></p> | | | | | | | | | | | | | |
| Keyboard TrackPoint® Touchpad ThinkLight™ | 6-row, ThinkVantage button, LED backlit, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ UltraNav™, buttonless glass surface touchpad below keyboard, multi-touch None | | | | | | | | | | | | | |
| Dimensions ³ Weight ² Case material | <p>14.0W" (WxDxH): 13.0" x 8.9" x 0.39-0.82"; 331mm x 226mm x 10.0-20.8mm</p> <p><i>Integrated battery:</i> from 3.4 lb (1.54kg) <i>Display cover:</i> Carbon Fiber; <i>Bottom:</i> Magnesium/Aluminum</p> | | | | | | | | | | | | | |
| Battery - type Battery - life ¹⁰ | Integrated Lithium Polymer 4-cell RapidCharge battery <i>Integrated battery (45.8Whr):</i> up to 8.2 hr | | | | | | | | | | | | | |
| Chipset Multicard reader ExpressCard Ports Monitor Cable | <p>Mobile Intel QS77 Express Chipset</p> <p>4-in-1 reader (SD, SDHC, SDXC, MMC) None One USB 3.0, one powered USB 2.0, external monitor (Mini DisplayPort) None</p> | | | | | | | | | | | | | |
| PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN | Two PCI Express Mini Card slots 11a/b/g/n, PCIe Small Form Factor Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 <i>Some:</i> Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS | | | | | | | | | | | | | |
| SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support | <p><i>Some:</i> User selectable, contract required with service provider</p> <p>None Bluetooth 4.0 wireless <i>Some:</i> Lenovo USB 2.0 Ethernet Adapter <i>Some:</i> Intel Active Management Technology (iAMT) HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 2 watt x 2 / volume up, down, mute buttons / dual array microphone, mic mute button, combo audio/mic jack</p> | | | | | | | | | | Supports ThinkVantage® technologies | | | |
| Security Security chip Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole, reset switch Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip | | | | | | | | | | <p>90-watt AC Adapter (RapidCharge) ThinkPad Roll Cage (bottom cover) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ROHS-compliant</p> | | | |
| Limited warranty ¹² | 3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available | | | | | | | | | | International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² | | | |

See footnotes for more detailed information

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Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, go to http://support.lenovo.com/en_US/product-service/warranty-status/WarrantyPolicies.page. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

- ¹ Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.
- ² **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.
- ³ **Thinness** may vary at certain points on the system.
- ⁴ **Wireless capability:** Requires compatible wireless-enabled options sold separately.
- ⁵ **TAA:** ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.
- ⁶ **Public network download modem speeds** are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.
- ⁷ **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.
- ⁸ **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- ⁹ **CD/DVD drive speeds** list maximum rates; rates are variable and are often less than the maximum.
- ¹⁰ **Battery:** These model numbers achieved the battery life based on MobileMark® 2007 during testing. For the ThinkPad X300, battery life is based on Business Winstone Battery Mark 2002. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.
- ¹¹ **External monitor:** This system supports a maximum of two external monitors. The integrated display(s) must be disabled to support two external monitors.
- ¹² **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ¹³ **Internet access not included.**
- ¹⁴ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.
- ¹⁶ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.
- ¹⁷ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.
- ¹⁸ **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with Depot or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.
- ¹⁹ **Depot repair service:** The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.
- ²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.
- ²¹ **For combination drives,** maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.

²² **Lenovo Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See Lenovo Warranty Services terms and conditions for complete details and restrictions.

²³ **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

²⁴ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.

²⁶ **Full-size keyboard:** As defined by ISO/IEC 15412.

²⁷ **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

²⁸ **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

³⁰ **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

³² **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

³⁶ **Wireless upgradable** allows the system to be wireless-enabled with an optional wireless Mini PCI or Mini PCI Express card. Designed to operate only with Lenovo options.

³⁷ **Optimus graphics** Optimus only switches in Windows 7 environment. It performs as discrete graphics in Windows Vista or Windows XP Professional environment.

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