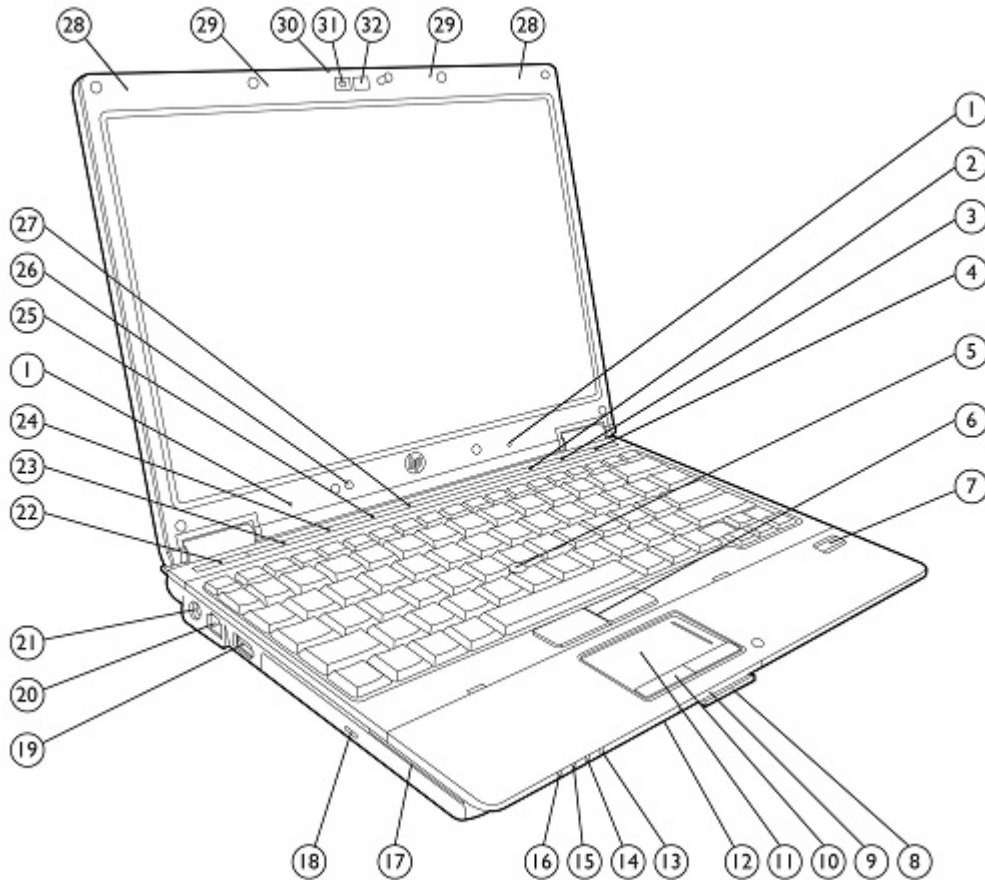# QuickSpecs

Overview

1. Dual-microphone array
2. Volume mute button with LED indicator
3. Volume down button with LED indicator
4. Volume up button with LED indicator
5. Pointstick
6. Pointstick buttons (2)
7. Optional HP Fingerprint Sensor
8. Display release button
9. Business Card slot (for use with Business Card Reader)
10. Touchpad buttons (2)
11. Touchpad with scroll zone
12. Speaker
13. Drive activity / HP 3D DriveGuard LED indicator
14. Battery charging LED indicator
15. Power/standby LED indicator
16. Wireless on/off LED indicator

17. Integrated Smart Card Reader
18. Optional optical drive or weight saver* (see below for left view of a 2.5" HDD configuration)
19. USB 2.0 Port (powered)
20. RJ-11/modem port
21. Power connector
22. Power button with LED indicator
23. HP QuickLook 3 button with LED indicator
24. HP QuickWeb button with LED indicator
25. Wireless on/off button with LED indicator
26. Ambient Light Sensor
27. Touchpad on/off button
28. Two WWAN antennas
29. Two WLAN antennas
30. Webcam LED indicator
31. Optional 2 MP Webcam
32. HP Night Light with on/off button

* Optional optical drive and weight saver are only available with the low voltage processor.

Overview

Left View Showing Hard Drive Option
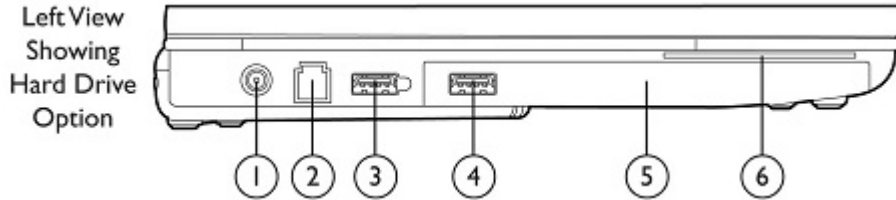
1. Power connector
2. RJ-11/modem port
3. USB 2.0 port (powered)

4. USB 2.0 port (not present with weight saver)
5. 2.5-inch internal storage bay*
6. Integrated Smart Card Reader

* With a standard voltage processor, this 2.5-inch bay is used for any available 2.5-inch hard drive or solid state drive; 1.8-inch hard drive bay is not available.
   With the low voltage processor and 1.8-inch 250 GB hard drive in 1.8-inch hard drive bay, this 2.5-inch bay can be used for a 2.5-inch 250 GB secondary hard drive, for RAID configuration.

Right View

Rear View
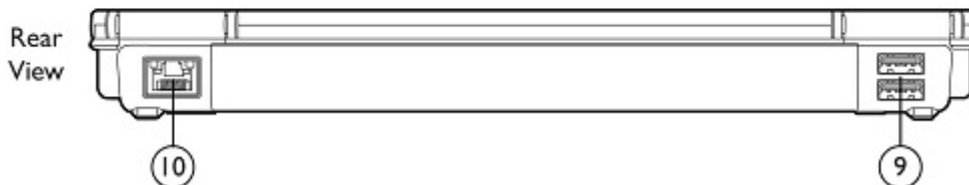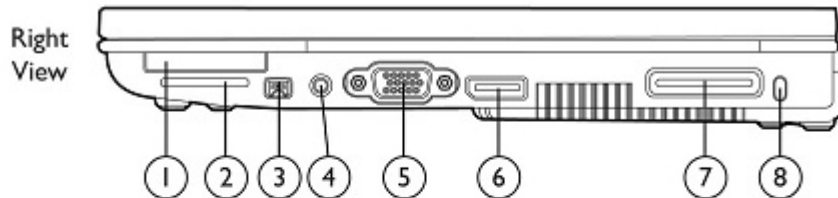
1. ExpressCard/34 slot
2. Secure Digital (SD) slot
3. 1394a port
4. Combo headphone/microphone jack
5. VGA connector (external monitor/projector)

6. DisplayPort
7. Docking connector
8. Kensington Lock slot
9. (2) USB 2.0 ports
10. RJ-45/Ethernet port

Overview
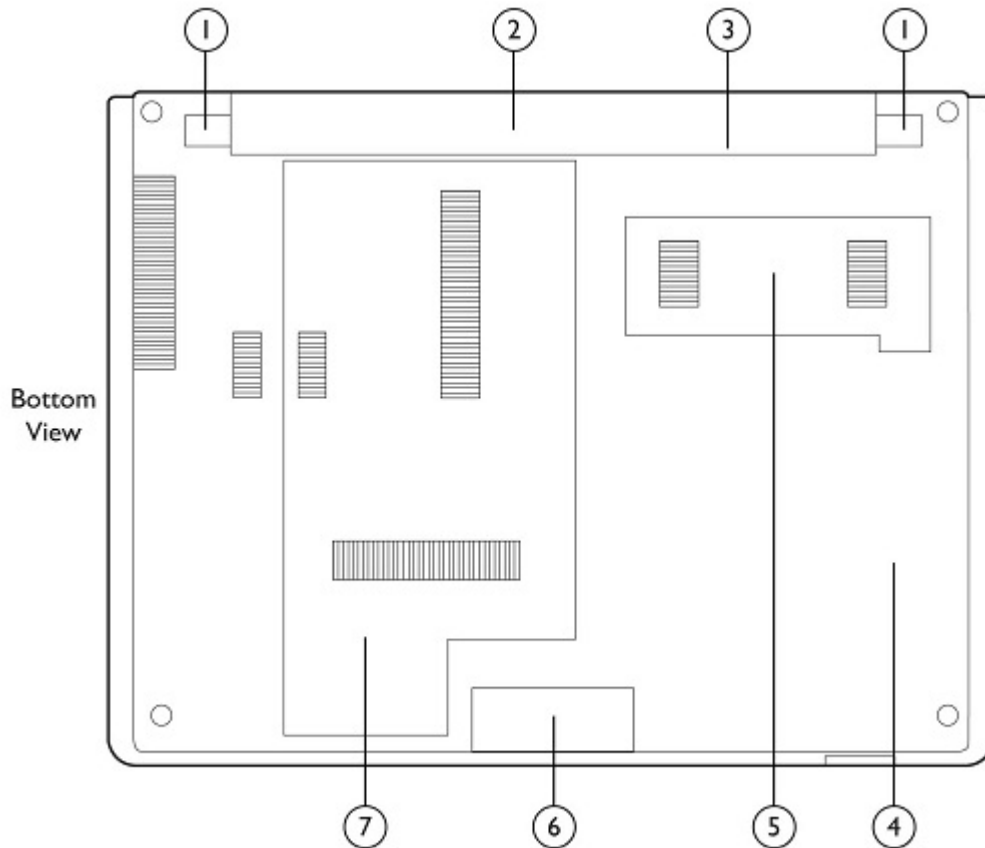
1. Battery release latch
2. Battery bay
3. SIM slot for WWAN (select models) - inside battery bay
4. 2.5-inch bay
5. Wireless module compartment
6. Speaker
7. 1.8-inch hard drive bay and memory module compartment

At A Glance

- Genuine Windows 7 versions, Genuine Windows Vista versions, Genuine Windows XP Professional available through downgrade rights from Windows 7 Professional, or FreeDOS
- Choice of an Intel® Core™ i7 or Core i5 standard voltage processor for maximum performance or an Intel® Core™ i7 low voltage processor with option for an optical drive or secondary hard drive
- Intel vPro technology (optional) enables you to remotely monitor, diagnose, and repair PCs over the network, even if a system's OS is inoperable or it is powered off
- Industrial, business rugged HP DuraCase construction features a full magnesium alloy chassis, magnesium/aluminum display enclosure, metal alloy hinges, and improved display latch; designed to meet the military standard Mil-Std-810G for vibration, dust, humidity, altitude, and high temperature operation*
- HP SkyRoom 90-day trial version available on configurations with a standard voltage processor for professional quality visual collaboration built on HP Video and Image processing engines for hi-fi audio, hi-def video, and hi-performance 3D application sharing
- HP Power Assistant to conserve power, increase battery run-time, monitor power needs, report workforce power consumption
- Choice of 9-cell, 6-cell, or 3-cell battery, including HP Long Life batteries, to customize weight, run-time, and battery life to your needs
- Touch-sensitive controls for HP QuickLook 3 (instant access to e-mail, calendar, contacts and tasks), HP QuickWeb, wireless

Overview

    on/off, touchpad on/off, mute, volume down, and volume up
- Flexible wireless connectivity options:
    - Integrated HP un2420 EV-DO/HSPA Mobile Broadband Module provides worldwide Gobi mobile Internet technology with GPS
    - Integrated Intel Centrino® Advanced-N 6200 802.11 a/b/g/n or Broadcom 802.11a/b/g/n or b/g wireless LAN module
    - Bluetooth® v2.1
- Choice of hard drive: up to 500 GB (2.5-inch) or up to 320 GB (1.8-inch) with HP 3D DriveGuard protection, or 80/160 GB Solid State Drive
- Optional fixed optical drive or secondary hard drive for RAID support available with low voltage processor
- 12.1-inch diagonal LED-backlit WXGA display, Ambient Light Sensor
- Intel HD Graphics with dynamic frequency
- Enhanced security features including integrated Smart Card Reader, HP ProtectTools, Computrace LoJack Pro ready, HP SpareKey, HP Disk Sanitizer, TPM 1.2 ;** optional HP Fingerprint Sensor, and optional HP Privacy Filter
- DisplayPort for sharper, deeper images
- Optional HP 2540 Docking Station provides additional DisplayPort, eSATA port, four additional USB ports, audio in/out ports, RJ-45, VGA, and new HP Docking Station Cable Lock
- Optional 2 MP Webcam with Business Card Reader Software
- Dual pointing devices (touchpad with scroll zone and pointstick)
- Spill-resistant keyboard with drains, DuraKeys
- HP Night Light
- ExpressCard/34 slot
- Secure Digital (SD) slot

* Testing was not intended to demonstrate fitness for DOD contracts requirements or for military use. Test results are not a guarantee of future performance under these test conditions.
** TPM module disabled where not permitted by law (for example, Russia and China).

Standard Features(availability may vary by country)

Processors	**Intel Standard Voltage Processor, soldered**
	Intel Core i7-620M Processor (2.66 GHz, 4 MB L3 cache)*
	Up to 3.33 GHz with Intel Turbo Boost Technology
	Intel Core i5-540M Processor (2.53 GHz, 3 MB L3 cache)*
	Up to 3.06 GHz with Intel Turbo Boost Technology
	Intel Core i5-520M Processor (2.4 GHz, 3 MB L3 cache)*
	Up to 2.93 GHz with Intel Turbo Boost Technology
	Intel Low Voltage Processor, soldered
	Intel Core i7-640LM Processor (2.13 GHz, 4 MB L3 cache)*
	Up to 2.93 GHz with Intel Turbo Boost Technology

* Intel's numbering is not a measurement of higher performance.
NOTE: Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.

Operating System	Preinstalled	Genuine Windows 7 Professional Edition 32*
		Genuine Windows 7 Professional Edition 64*
		Genuine Windows XP Professional available through downgrade rights
		from Windows 7 Professional*†
		Genuine Windows 7 Home Premium Edition 32*
		Genuine Windows 7 Home Premium Edition 64*
		Genuine Windows 7 Home Basic 32 (select countries)*
		Genuine Windows Vista Business 32**
		Genuine Windows Vista Home Basic 32**
		FreeDOS
	Supported	Genuine Windows Vista Business 64**
		Genuine Windows Vista Enterprise 32**
		Genuine Windows Vista Enterprise 64**
		Genuine Windows 7 Enterprise 32*
		Genuine Windows 7 Enterprise 64*
		Genuine Windows 7 Ultimate 32*
		Genuine Windows 7 Ultimate 64*
	Certified	SuSE Linux Enterprise Desktop 11

* System may require upgraded and/or separately purchased hardware and/or a DVD drive to install the Windows 7 software and take full advantage of Windows 7 functionality. See: http://www.microsoft.com/windows/windows-7/ for details.

** Certain Windows Vista product features require advanced or additional hardware. See: http://www.microsoft.com/windowsvista/getready/hardwarereqs.mspx and http://www.microsoft.com/windowsvista/getready/capable.mspx for details. Windows Vista Upgrade Advisor can help you determine which features of Windows Vista will run on your computer. To download the tool, visit: http://www.windowsvista.com/upgradeadvisor.

† Windows XP Professional is preinstalled on this system and includes end user rights and media for Windows 7 Professional. You may only use one version at a time. You must back up all data (files, photos, etc.) before uninstalling and installing operating systems to avoid loss of your data.

Standard Features(availability may vary by country)

Chipset	Mobile Intel QM57 Express Chipset

Intel Core i5 with vPro/Core i7 with vPro technology capable	Intel Core i5 with vPro and Core i7 with vPro technology is a selectable feature that is available on units configured with an Intel Centrino® Advanced-N 6200 series WLAN module and a preinstalled Windows operating system. It provides advances in remote manageability, security, energy efficient performance, and wireless connectivity. Intel Active Management Technology (AMT) offers built-in manageability and proactive security for networked notebook PCs, even when they are powered off* or when the operating system is inoperable. It can help identify threats before they reach the network, isolate infected systems, and update PCs regardless of their power state.
	*Requires a Windows operating system, network hardware and software, connection with a power source, and a direct (non-VPN) corporate network connection which is either cable or wireless LAN. NOTE: Some functionality of Intel Core i5 with vPro/Core i7 with vPro technology, such as Intel Active Management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel Core i5 with vPro/Core i7 with vPro technology is dependent on 3rd party software providers. Compatibility with future "virtual appliances" is yet to be determined.

Graphics	Intel HD Graphics with dynamic frequency Microsoft DirectX 10.1 (Shader Model 4.1)

Display	Internal	12.1-inch diagonal LED-backlit WXGA anti-glare (1280 x 800) Ambient Light Sensor Optional HP Privacy Filter
	External	Up to 32-bit per pixel color depth **DisplayPort** supports resolutions up to 2560 x 1600, 30-bit color depth at 60 Hz, and full HD (1920 x 1080) monitors, 24-bit color depth at 120 Hz **VGA** port supports resolutions up to 2048 x 1536 at 75 Hz, and lower resolutions at up to 100 Hz NOTE: Resolutions are dependent upon monitor capability, and resolution and color depth settings.

Memory	Standard	DDR3 PC3-10600 SDRAM (1333 MHz)* Two SODIMM slots supporting dual-channel memory 1024 MB, 2048 MB and 4096 MB SODIMMs
	Maximum	Upgradeable to 8192 MB with 4096 MB SODIMMs in slots 1 and 2
	Dual-channel	Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory channels.

* Memory bus runs at a maximum of 1066 MHz.
NOTE: Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed. Full availability of 4 GB or more of memory requires a Windows 64-bit operating system or Linux. With Windows 32-bit operating systems, the amount of usable memory is dependent upon your configuration, so that above 3 GB all memory may not be available due to system resource requirements.

QuickSpecs

Standard Features(availability may vary by country)

Communications	Integrated Intel Gigabit Ethernet (10/100/1000 NIC)*
	56K V.92 modem**
	* The term "10/100/1000" or "Gigabit" Ethernet indicates compliance with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.
	** Designed for downloads from 56K modem compliant sources. Maximum achievable download transmission rates currently do not reach 56 KB/s, and will vary with line conditions. Modem availability is subject to country regulatory approval.

Wireless Devices		Support for a broad range of secure, integrated wireless LAN and wireless WAN options featuring support for the latest industry standards. Mobile Broadband (WWAN) requires a Windows operating system and is available in select countries as a standard, factory configurable feature or as an option to be added later. Integrated Bluetooth is also available (factory configurable only) and can be combined with any of the supported wireless LAN and wireless WAN options.
	HP un2420 EV-DO/HSPA Mobile Broadband Module	Integrated mobile broadband module with Gobi global mobile Internet technology that provides connectivity to both CDMA (EVDO) and UMTS (HSPA) networks. It also provides GPS functionality for various mapping applications and security applications such as Computrace LoJack Pro Premium for HP ProtectTools. NOTE: Separately purchased mobile network operator service is required. Two 850/900/1575/1800/1900/2100 MHz antennas integrated in the top of the display panel support current and future WWAN technologies.
	All 802.11 integrated wireless LAN options	Wi-Fi Certified* Cisco Compatible Extensions support Wired Equivalent Privacy (WEP) support up to 128-bit keys Wi-Fi Protected Access (WPA) and WPA2 support 802.1x authentication support, including EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, and LEAP Advanced Encryption Standard (AES) support Two antennas integrated in the display enclosure
	Intel Centrino Advanced-N 6200 (2x2)	Integrated support for 802.11a, b, g, and n* 2 transmit, 2 receive antennas Up to 300 mbps data rate
	Broadcom 4322AGN 802.11a/b/g/n Wi-Fi Adapter	Integrated support for 802.11a, b, g, and n Up to 300 mbps data rate
	Broadcom 4312G 802.11b/g WiFi Adapter	Integrated support for 802.11 b and g Up to 54 mbps data rate
	HP Integrated Module with Bluetooth Wireless Technology	Bluetooth Specification v2.1 compliant Works with a wide range of Bluetooth devices
	* In countries where 802.11n is not allowed, this capability is not enabled (802.11a/b/g only).	

Standard Features(availability may vary by country)

Keyboard	The HP spill-resistant keyboard is designed using a thin layer of Mylar film under the keyboard and a drain system that funnels fluid through a hole in the bottom of the notebook. This minimizes the risk of damage to sensitive components underneath. The 101/102-key compatible keyboard features an industry standard, full-pitch key layout with desktop keyboard features, such as the isolated inverted-T cursor control keys, editing keys, both left and right control and alt keys, and 12 function keys. U.S. and International key layouts are available. Other features include an integrated numeric keypad, hotkeys for instant access to power conservation, brightness, and other features, 19 mm x 19 mm key pitch (center-to-center spacing), 2.0 mm stroke, and comfort-dished keycaps.
	HP DuraKeys is a clear coating applied over the notebook keyboard that helps protect the finish and the printed characters on the keys. HP DuraFinish helps protect the finish on the keyboard deck, graphics, and icons from normal wear and tear.
	HP Night Light shines directly on keyboard for low-light conditions.

Touch-sensitive controls	Touch-sensitive controls provide easy access to the following features: HP QuickLook 3, HP QuickWeb, wireless on/off, touchpad on/off, volume mute, volume down, volume up.

Dual Pointing devices	Touchpad with scroll zone, two pick buttons Pointstick, two additional pick buttons

Expansion card slots	ExpressCard/34 slot	Supports ExpressCard/34
	Integrated Smart Card Reader	Compatible with ISO 7816 compliant Smart Cards PC/SC interface support
	Secure Digital slot	Supports SD (Secure Digital), MMC (MultiMedia Card)

Internal Storage		**Standard Voltage Processor Configurations**
	2.5-inch storage bay	2.5-inch 250/320/500 GB 7200 rpm SMART SATA II Hard Drive -or- 2.5-inch 80/160 GB Solid State Drive

NOTE: 1.8-inch hard drive bay is not available with a standard voltage processor.

		Low Voltage Processor Configurations
	1.8-inch hard drive bay	1.8-inch 160/250/320 GB 5400 rpm SMART SATA II Hard Drive -or- 1.8-inch 80/160 GB Solid State Drive
	2.5-inch secondary hard drive for RAID support*	2.5-inch 250 GB 7200 rpm SMART SATA II Hard Drive

* Requires1.8-inch 250 GB 5400 rpm hard drive in 1.8" hard drive bay.

NOTE: These hard drives are customer removable and will withstand multiple insertion/removal cycles. Up to 15 GB is reserved for the system recovery software.

Standard Features(availability may vary by country)

	HP 3D DriveGuard (Windows models with hard drives only)	The hard drive is mounted directly to the notebook frame, reducing the transmission of shock to the hard drive. Uses three-axis digital motion detection with intelligent sensitivity to help protect the hard drive during normal use from shock and vibration. The digital accelerometer temporarily halts all data transfer and parks the hard drive when abrupt motion is detected.
Fixed Optical Bay (low voltage processor configurations only)	**9.5 mm SATA optical drive** -or- **Secondary hard drive*** -or- **Weight Saver**	DVD+/-RW SuperMulti DL Drive DVD-ROM Drive 2.5-inch 250 GB 7200 rpm SMART SATA II Hard Drive for RAID support

* Requires1.8-inch 250 GB 5400 rpm hard drive in 1.8-inch hard drive bay.

External Optical Drive	Optional HP External USB CD/DVD R/RW Drive

Interfaces	ExpressCard/34 slot	One
	Smart Card Reader	One
	External monitor	Two – (1) DisplayPort, (1) VGA
	Secure Digital slot	One
	1394a	One
	Combo headphone/microphone jack	One
	Power connector	One
	RJ-11/modem	One
	RJ-45/Ethernet	One
	USB 2.0	Three (including one powered) Fourth USB 2.0 port available on configurations with 2.5-inch hard drive
	Docking connector	For HP 2540 Docking Station

Standard Features(availability may vary by country)

Audio/Visual	High definition audio Integrated dual-microphone array Integrated mono speaker Touch-sensitive controls for volume up, volume down, and mute Combo headphone/microphone jack Optional 2 MP webcam with Business Card Reader software

- Supports videoconferencing and still image capture
- Large image sensor for excellent color matching and good low light sensitivity
- Up to 30 frames/sec
- AutoMacro focus lens
- Video capture at VGA, 1.3 Mpixel, and 2 Mpixel resolutions
- 16-bit true color (camera sensors output YCrCb format among others)

Software	Preinstalled software with Windows operating system	HP SkyRoom (trial version) HP Recovery Manager (available with Windows 7 or Vista only) HP Support Assistant (available with Windows 7 or Vista only) HP ProtectTools Security Manager HP QuickLaunch Buttons Software HP QuickLook 3 HP QuickWeb HP Power Assistant HP Connection Manager 3.1 HP Wireless Assistant HP DayStarter Microsoft Office Professional 2007 60-day Convertible Trial McAfee Total Protection* PDF Complete SE Roxio Creator Business 10 (select models) InterVideo WinDVD (select models) Synaptics Touchpad Driver HP Webcam Software WinZip 12 (trial version)
	Additional software available from the web	HP SoftPaq Download Manager HP Client Manager Software HP Client Management Solutions Java Card Security for HP ProtectTools

* 60 day trial period for McAfee Total Protection for Small Business software. Internet access required to receive updates. First update included. Subscription required for updates thereafter.

HP Recovery Manager	Models shipped with Windows 7 or Windows Vista include HP Recovery Manager. HP Recovery Manager enables fast recovery of the factory preinstalled image if the system becomes corrupted or if important system files are accidentally deleted. Up to 15 GB of the hard drive is reserved for the system recovery software.

Standard Features(availability may vary by country)

Security	Standard Features	HP ProtectTools Security Manager Integrated Smart Card Reader Enhanced Pre-Boot Security HP SpareKey One-Step Logon Setup Password DriveLock Password TPM 1.2 Embedded Security Chip* TPM Enhanced DriveLock* HP Disk Sanitizer Kensington Lock slot Support for Computrace** LoJack Pro for HP ProtectTools	
	Optional Features	HP Fingerprint Sensor	Enhanced sensor scans the fingerprint to uniquely identify and authenticate a person.
		HP Privacy Filter	Narrows viewing area so that screen data is visible only to persons directly in front of the monitor.
		Computrace** LoJack Pro Premium for HP ProtectTools with GPS Tracking	Subscription based security solution providing the ability to track, initiate physical recovery, conduct asset management, and perform remote data delete by utilizing GPS technology. GPS functionality requires HP un2420 EV-DO/HSPA Mobile Broadband Module.

* TPM module disabled where use is restricted by law; for example, Russia and China.
** The Computrace agent is shipped turned off, and must be activated by customers when they purchase a subscription with terms ranging from one to five years.
For more information on HP security solutions refer to: http://www.hp.com/go/security.

HP ProtectTools Security Manager

HP ProtectTools Security Manager is the security platform for business notebooks and desktops. The HP ProtectTools Security Manager is an extensible client security console that delivers enhanced security capabilities through add-on software modules. The following modules are available on the hard drive (also downloadable from the web) and can be configured in Software Setup:

- Credential Manager for HP ProtectTools
- Device Access Manager for HP ProtectTools
- Drive Encryption for HP ProtectTools
- File Sanitizer for HP ProtectTools
- Privacy Manager for HP ProtectTools (Chat & Sign)
- Embedded Security for HP ProtectTools
- Computrace LoJack Pro for HP ProtectTools

HP ProtectTools is now centrally manageable with the capability to manage notebooks from a single point. Security is management ready out of the box, in partnership with Digital Persona. New features address requirements that customers expect from a centrally managed security solution such as user provisioning, credential reset, and credential revocation.

HP ProtectTools provides two separate management solutions, targeted at the enterprise and the SMB:

- Digital Persona Pro AD: Designed for the enterprise customer. Integrates with Active Directory and gives IT Managers the ability to provision users, create login policies based on passwords,

Standard Features(availability may vary by country)

biometrics or smartcards. Management features also include remote credential recovery in case the user forgets the password, loses the smartcard or cannot use the fingerprint reader for any reason. In addition, advanced auditing capabilities are also built in. Digital Persona Pro AD is available now.

- Digital Persona Pro Workgroup: Designed for the small business customer. Provides features similar to the Active Directory version, but for workgroups. Workgroup activation is built into HP ProtectTools, and activations of up to five seats are completely free. Digital Persona Pro Workgroup will be available for activation in January 2010, directly from HP ProtectTools.

Power Supply	External 65-watt Smart AC adapter, 6-foot (1.8-meter) power cord included. Total length including external AC adapter is 12 feet (3.66 meter). HP Fast Charge* *HP Fast Charge recharges your battery up to 90% within 90 minutes when the system is off. Fast Charge Technology does not apply to 9- cell primary batteries.

Battery	Primary Battery	HP 9-cell 93 WHr Li-Ion Primary Battery HP 6-cell 62 WHr Li-Ion Primary Battery HP 3-cell 31 WHr Li-Ion Primary Battery HP Long Life 6-cell 55 WHr Li-Ion Primary Battery HP Long Life 3-cell 28 WHr Li-Ion Primary Battery

Battery Life		Intel Standard Voltage Processor	Intel Low Voltage Processor
	HP 9-cell Primary Battery	Up to TBD hours	Up to TBD hours
	HP 6-cell Primary Battery	Up to TBD hours	Up to TBD hours
	HP Long Life 6-cell Primary Battery	Up to TBD hours	Up to TBD hours
	HP 3-cell Primary Battery	Up to TBD hours	Up to TBD hours
	HP Long Life 3-cell Primary Battery	Up to TBD hours	Up to TBD hours

NOTE: Battery life will vary depending on the product model, configuration, loaded applications, features, use, wireless functionality and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. See MobileMark07 battery benchmark www.bapco.com/products/mobilemark2007 for additional details.

System Standby Time	Up to TBD week

Power Conservation	Supports enhanced Intel SpeedStep technology (allows Battery Optimized Mode, Maximum Performance Mode, or Automatic mode) Intel Display Power Saving technology Hibernation Standby ACPI compliance

Standard Features(availability may vary by country)

Docking and Stands

HP 2540 Docking Station
HP USB 2.0 Docking Station
HP Essential USB 2.0 Port Replicator
HP Dual Hinge Notebook Stand
HP Display and Notebook Stand
HP Basic Adjustable Stand
HP Adjustable Display Stand
HP Adjustable Dual Display Stand

Service and Support

HP Services offers limited 3-year, 1-year and 90-day warranty options depending on country; 1-year limited warranty on primary battery. On-site service and warranty upgrades are also available. HP Care Pack Services extend service contracts beyond the standard warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: http://www.hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at: http://www.hp.com/hps/carepack.

NOTE: Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details. http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp.

QuickSpecs

Options (availability may vary by country)

Memory	HP 1 GB (DDR3 1333 MHz) SODIMM	AT911AA
	HP 2 GB (DDR3 1333 MHz) SODIMM	AT912AA
	HP 4 GB (DDR3 1333 MHz) SODIMM	AT913AA
Storage	HP 250GB Pocket Media Drive	FE477AA
	HP External USB Drive CD/DVD R/RW	FS943AA
	HP Upgrade Bay SATA 500 GB 7200 rpm Hard Drive	AU097AA
	HP Primary SATA 500 GB 7200 rpm Hard Drive	AU098AA
	HP Primary SATA 320 GB 7200 rpm Hard Drive	AS282AA
Expansion Solutions	HP 2540 Docking Station	VU895AA
	HP Basic Adjustable Stand	AL549AA
	HP USB 2.0 Docking Station	FQ834AA
	HP Essential USB 2.0 Port Replicator	AQ731AA
	HP Dual Hinge Notebook Stand	AW661AA
	HP Display & Notebook Stand	AW662AA
	HP Adjustable Display Stand	AW663AA
	HP Adjustable Dual Display Stand	AW664AA
Communications	HP un2420 EVDO/HSPA Mobile Broadband Module	WD301AA
Power	65W Smart AC Adapter	ED494AA
	90W Smart AC/Auto/Air Combo Adapter	AJ652AA
	HP 65W Slim Adapter	AX727AA
	HP Smart 65W Travel AC Adapter	AU155AA
	90W Smart AC Adapter	ED495AA
	HP 9-Cell Li-Ion Primary Battery	TBD

Options (availability may vary by country)

Carrying Cases		
	HP Deluxe Nylon Backpack	RR317AA
	HP Value Nylon Case	RR314AA
	HP Universal Nylon Case	RR315AA
	HP Executive Leather Case	RR316AA
	HP Deluxe Nylon Backpack	RR317AA
	HP Deluxe Roller Case	GD405AA
	HP Basic Backpack	AM863AA
	HP Basic Messenger	AP355AA
	HP Basic Carrying Case	AJ078AA
	HP Professional Series Carrying Case	AT886AA
	HP Professional Series Backpack	AT887AA
	HP Professional Series Messenger	AT888AA
	HP Professional Series Designer Tote	AT889AA
	HP Professional Series Slip Case	AT890AA
	HP Elite Series Quick Case	AT892AA

Security		
	HP/Kensington MicroSaver Cable Lock	PC766A
	HP Compaq Notebook Cable Lock	AY475AA
	HP Docking Station Cable Lock	AU656AA
	HP 12.1" Display Privacy Filter	AJ356AA
	HP ExpressCard Smart Card Reader with Java Card	AJ451AA

Input/Output Devices		
	HP USB Keyboard & Mouse Bundle	RC465AA
	HP USB Optical Travel Mouse	RH304AA
	HP Wireless Mouse	AR085AA
	HP PS/2 Keyboard & Mouse Bundle (requires USB-PS/2 adapter)	RC464AA
	HP BT Headset	AR084AA
	HP Mobile Audio Speakers	FS944AA
	HP Mobile Productivity Bundle	AQ729AA
	HP Notebook Companion Projector	AX325AA
	HP Migration Cable for Windows 7	AY493AA
	HP Premium Autofocus Webcam	KQ245AA
	Premium Digital Headset	KJ270AA

Memory

DDR3 PC3-10600 SDRAM (1333 MHz)*
Two SODIMM slots supporting dual-channel memory
SODIMM sizes supported: 1024 MB, 2048 MB and 4096 MB

Standard Memory	● 2048 MB (2048 MB x 1)
	● 3072 MB (2048 MB + 1024 MB)
	● 4096 MB (4096 MB x 1)
	● 4096 MB (2048 MB x 2)
	● 6144 MB (4096 MB + 2048 MB)
	● 8192 MB (4096 MB x 2)

Optional Memory Upgrades Support for up to 8192 MB of memory with the installation of optional DDR3 SDRAM memory kits. Both memory slots are user accessible. Please refer to the Hardware and Software Guide for installation procedures. Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory slots.

Up to	Slot 1	Slot 2
3072 MB	2048 MB	1024 MB
4096 MB	2048 MB	2048 MB
4096 MB	4096 MB	empty
6144 MB	4096 MB	2048 MB
8192 MB	4096 MB	4096 MB

* Memory bus runs at a maximum of 1066 MHz.

NOTE: This chart does not represent all possible memory configurations. Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only HP branded memory modules to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed. Availability of 4 GB or more of memory requires Windows Vista Business 64-bit or Linux. With Windows 32-bit operating systems, memory above 3 GB may not all be available due to system resource requirements.

Memory Upgrades	HP 1 GB (DDR3 1333 MHz) SODIMM	AT911AA
	HP 2 GB (DDR3 1333 MHz) SODIMM	AT912AA
	HP 4 GB (DDR3 1333 MHz) SODIMM	AT913AA

Storage

Internal Storage Device

Standard Voltage Processor Configurations

Hard Drives (2.5-inch SMART SATA II)	Quantity Supported	Drive Bay
250 GB 7200 rpm 320 GB 7200 rpm 500 GB 7200 rpm	One	2.5-inch storage bay
- or -		
Solid State Drive (2.5-inch)		
80 GB Solid State Drive 160 GB Solid State Drive	One	2.5-inch storage bay

NOTE: 1.8-inch hard drive bay is not available with a standard voltage processor.

Low Voltage Processor Configurations

Hard Drives (1.8-inch SMART SATA II)	Quantity Supported	Drive Bay
160 GB 5400 rpm 250 GB 5400 rpm	One	Dedicated 1.8" hard drive bay
- or -		
Solid State Drive (1.8-inch)		
80 GB Solid State Drive 160 GB Solid State Drive 320 GB Solid State Drive	One	Dedicated 1.8" hard drive bay

Secondary Hard Drive for RAID* (2.5-inch SMART SATA II)		
250 GB 7200 rpm	One	2.5-inch storage bay

* Requires1.8-inch 250 GB 5400 rpm hard drive in 1.8-inch hard drive bay.

Optical Drive Support
NOTE: Internal optical drive supported on low voltage processor configurations only.

Fixed optical drives (95mm SATA)	Quantity Supported	Drive Bay
DVD+/-RW SuperMulti DL Drive DVD-ROM Drive	One	Fixed optical bay

External Optical Drives	Quantity Supported	Optional Expansion Unit
CD/DVD R/RW Drive	One	HP External USB CD/DVD R/RW Drive

Technical Specifications

System Unit	Dimensions (HxWxD)	1.10 in (at front) x 11.1 in x 8.4 in 28 mm (at front) x 282.2 mm x 213.4 mm
	Weight	Starting at 3.31 lb (1.50 kg)

NOTE: Height varies depending upon where on the notebook the measurement is made. Weight varies by configuration and components. Weight includes hard drive and wireless.

Stand-Alone Power Requirements (AC Power)	Nominal Operating Voltage	18.5 V
	Average Operating Power	TBD W
	Max Operating Power	< 65 W
Temperature	Operating	32° to 95° F (0° to 35° C) (not writing optical)
		41° to 95° F (5° to 35° C) (writing optical)
	Non-operating	-4° to 140° F (-20° to 60° C)
Relative Humidity	Operating	10% to 90%, non-condensing
	Non-operating	5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature
Shock	Operating	125 G, 2 ms, half-sine
	Non-operating	200 G, 2 ms, half-sine
Random Vibration	Operating	0.75 grms
	Non-operating	1.50 grms
Altitude (unpressurized)	Operating	-50 to 10,000 ft (-15.24 to 3,048 m)
	Non-operating	-50 to 40,000 ft (-15.24 to 12,192 m)
Industry Standard Certifications	UL	Yes
	CSA	Yes
	FCC Compliance	Yes
	ENERGY STAR®	Select models*
	EPEAT	Registered Gold in United States**
	ICES	Yes
	GS	Yes
	Australia / NZ A-Tick Compliance	Yes
	CCC	Yes
	Japan VCCI Compliance	Yes
	KCC	Yes
	BSMI	Yes
	CE Marking Compliance	Yes
	BNCI or BELUS	Yes
	CIT	Yes
	GOST	Yes
	Saudi Arabian Compliance (ICCP)	Yes
	SABS	Yes
	UKRSERTCOMPUTER	Yes

Technical Specifications

* Configurations of the HP EliteBook 2540p that are ENERGY STAR qualified are identified as HP EliteBook 2540p ENERGY STAR on HP websites and on www.energystar.gov.

** EPEAT Gold Registered in U.S. EPEAT registration varies by country. See www.epeat.net for registration status by country.

NOTE: For accessibility information on HP products, please visit: http://www.hp.com/accessibility.

Audio

Hardware	Implementation	IDT 92HD75B High Definition CODEC
	Touch-Sensitive Volume Controls	Volume up, volume down, and mute
	Full Duplex	Yes
	Combo Microphone /Headphone	Stereo
	Integrated Microphone	Yes, dual-microphone array when equipped with optional webcam

Audio Output Quality	Frequency Response	20 Hz - 20 kHz
	Signal to Noise Ratio	>85 dB
	Total Harmonic Distortion	0.01%
	Noise Floor	-110 dB
	Play/Record Sampling Rate(s)	8 kHz - 48kHz
	DAC	16, 20 or 24-bit
	ADC	16 or 20-bit

Integrated Stereo Speakers	Power Rating	2 Watts
	Impedance	4 Ohms

Security

Technical Specifications

HP Fingerprint Sensor (optional)	Mobile Voltage Operation	3.0V-3.6V Single Supply
	Operating Temperature	32° - 158°F (0° - 70°C)
	Current Consumption @ 3.3V	Less than 70 mA peak imaging and scrolling Less than 25 mA hardware finger detection Advanced Power Management
	High-Rate Image Capture	Up to 240 image frames /sec
	ESD Resistance	IEC 61000-4-2 Level 4 (±15KV)
	Detection Matrix	192 x 16 Pixels 9.7 mm x 0.81 mm 500 ppi High-Resolution Images