Overview

## HP x2 210 G2 Detachable PC



- 1. Webcam
- 2. Front-facing camera LED
- 3. Speakers (2)
- 4. Guide pins (2)

- 5. Detachable keyboard
- 6. Touchpad

Overview



Front-left view

Volume control

2. Stereo headphone-out/mic-in combo jack

### Overview

# At A Glance

- An affordable 2 in 1 designed to tablet-class thinness, featuring five flexible positions for comfort and productivity
- Windows 10 Pro or Windows 10 Home, and Windows 10 MSNA
- Intel® Atom™ x5 Z8350 (up to 1.92 GHz, 2 MB cache, 4 cores)
- Integrated Intel® HD Graphics
- 10.1" diagonal WXGA Anti-glare WLED, eDP (1280 x 800) UWVA Ultra-Slim Touch Display
- Up to 4 GB of memory
- 0.92 cm (0.36 in) thin for tablet only\*
- Starting weight for Tablet only 0.59 kg (1.30 lbs)
- Starting Tablet and Keyboard weight 1.2 kg (2.60 lbs)
- HD Audio with DTS Studio Sound<sup>™</sup>, dual speakers and Web camera
- Up to 128 GB eMMC storage
- Multitouch gestures enabled for clickpad
- Security features include fTPM 2.0
- Wireless connectivity:
  - o Intel® 802.11 a/b/g/n/ac (2x2) +Bluetooth® 4.2 Combo
- Standard commercial 1 year limited warranty. Optional HP Care Packs also available.

NOTE: See important legal disclosures for all listed specs in their respective features sections.



<sup>\*</sup> HP X2 210 G2 is only offered with Keyboard.

# **Technical Specifications**

## **PRODUCT NAME**

HP x2 210 G2 Detachable PC

## **OPERATING SYSTEM**

Preinstalled<sup>1</sup> Windows 10 Home 64<sup>1</sup>

Windows 10 Pro 64<sup>1</sup> Windows 10 MSNA 64<sup>1</sup>

 Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.microsoft.com.

## **PROCESSOR**

Intel® Atom™ x5 Z8350 (1.44GHz up to 1.92 GHz, 2 MB cache, 4 cores)

## **CHIPSET**

Integrated SoC

## **GRAPHICS**

Intel® HD Graphics 400

#### Supports

Dynamic Graphics Frequency, DX12, OpenGL 3.X, OpenCL 1.2

## **DISPLAY**

### Internal

#### Touch

10.1" (25.65 cm) diagonal WXGA Anti-glare WLED, eDP (1280 x 800) UWVA Ultra-Slim

- 250 nits
- Touch solution with flush glass
- Multitouch enabled



# **Technical Specifications**

## **STORAGE**

#### Embedded Multi Media Card (eMMC) on Tablet<sup>1</sup>

2/32 GB 4/64 GB 4/128 GB

### **Expandable Card Expansion on Tablet**

Micro Secure Digital (SD) Media Reader Support SD/SDHC/SDXC (Up to 2TB) Push-Push Insertion/Removal

**NOTE:** Sold separately or as an optional feature.

Internal component upgrades to storage are not available after factory configuration.

### **MEMORY**

On-board system memory LPDDR3-1600 Single Channel Support LPDDR3-1866 1.2V (Transfer rates up to 1600 MT/s)

#### Supports up 4GB

2 GB (256 MB x16 x 4pcs) 4 GB (256 MB x 16 x 4 x 2pcs)

**NOTE:** Internal component upgrades to memory are not available after factory configuration.

# **NETWORKING/COMMUNICATIONS**

### Wireless LAN (WLAN)

Intel® 802.11 a/b/g/n/ac (2x2) +Bluetooth® 4.2 Combo1

Compatible with Miracast-certified devices<sup>2</sup> Connected Standby support

- 1. Wireless access point and Internet service is required and is not included. Availability of public wireless access points limited.
- 2. Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming media players that also support Miracast. You can use Miracast to share what you're doing on your PC and present a slide show. For more information: http://windows.microsoft.com/en-us/windows-8/project-wireless-screen-miracast.



## **AUDIO/MULTIMEDIA**

#### **Audio**

HD Audio with DTS Studio Sound™ Dual Speakers

#### Microphone

- Single Digital Mic
- Enable HP Noise Cancellation
- Support Voice Recognition

#### **Web Cameras**

Two Fixed Integrated Web cameras1

#### Front

**HP True Vision HD** 

HD 720p (1280 x 720) camera - indicator LED, USB 2.0, f2.0

#### Rea

HP True Vision 5 MP Fixed Focus (2592 x 1944) support WFOV

1. Wireless access point and Internet service is required and is not included. Availability of public wireless access points limited.

# **KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS**

#### **Keyboard and clickpad**

93% Island style thin cover keyboard (1.5mm travel distance) with image sensor clickpad Multitouch gestures enabled for clickpad 6 PIN Pogo-pin docking connector connect to slate Supports Windows 10 Modern Trackpad Gestures Optional Detachable Hard Keyboard Cover<sup>1</sup>

1. Sold separately or as an optional feature.

#### **Buttons**

Power

Volume control up and down

## **LED Indicators**

#### **Tablet**

Charging Status Webcam

### Keyboard

Caplock

mute



### **SOFTWARE AND SECURITY**

### **Information and Productivity**

Dropbox Glide Snapfish- Metro Netflix- Metro<sup>1</sup> Amazon- Metro Trip Advisor- Metro Priceline

#### **HP Value Added Software**

Buy Office
HP 3D DriveGuard
HP Touchpoint Manager<sup>2</sup>
HP Store Bookmarks in EMEA
HP Support Assistant
HP PC Hardware Diagnostics
HP Setup Integrated OOBE
HP ePrint<sup>3</sup>
HP School Pack<sup>4</sup>
Win10 Welcome App
Win 10 Recovery Manager
Internet Explorer Home
Bing Search for IE11

## Security

fTPM 2.0 (Intel® Technology) Avast Secureline VPN

#### **NOTES:**

- 1. Netflix Metro trial membership must be used within 30 days of account registration. To avoid being charged future fees of \$9.99/monthly simply cancel +1(886) 579-7172) before the 30 day trial period ends.
- 2. HP Touchpoint Manager requires purchase of a subscription HP Touchpoint Manager supports Windows operating systems, and PCs, notebooks, tablets, and smartphones from various manufacturers. Not available in all countries. See www.hp.com/touchpoint for availability information.
- 3. HP ePrint requires an internet connection to HP web-enabled printer and HP ePrint account registration (for a list of eligible printers, supported documents and image types and other HP ePrint details, see <a href="http://www.hp.com/go/businessmobileprinting">http://www.hp.com/go/businessmobileprinting</a>.
- 4. HP School Pack is sold separately or as an optional feature.



## **POWER**

### **Power Supply**

45W USB Type-C<sup>™</sup> AC adapter

#### **Power Cord**

Power cord is 1-meter-long (3.28 feet)

#### **Primary Battery (Tablet)**

2- cell Lithium Polymer battery (32.5 WHr)

**NOTE:** Battery is internal and not replaceable by customer. Serviceable by warranty.

#### **Battery life**

TBD 1

#### **HP Fast Charge**

30 minutes 50%

#### **System Standby Time**

TBD

1. Windows 10/MM14 battery life will vary depending on various factors including 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 www.bapco.com for additional details.

## **WEIGHTS & DIMENSIONS**

## Weight<sup>1</sup> Tablet only

0.59 Kg (1.3 lbs)

#### **Keyboard only**

1.2 Kg (2.6 lbs)

## Dimensions<sup>2</sup>

 $(w \times d \times h)$ 

#### **Tablet only**

26.5 x 17.3 x 0.92 cm (10.43 x 6.81 x 0.36 in)

#### Tablet with keyboard

26.5 x 18.3 x 2.35 cm (10.43 x 6.81 x 0.93 in)

- 1. Weight varies by configuration and components.
- 2. Height varies depending upon where on the notebook the measurement is made.



# **Technical Specifications**

## **PORTS/SLOTS**

#### **Tablet**

- 1 USB 3.0
- 1 USB Type-C<sup>™</sup> 2.0 (Data transfer + Charging)
- 1 Headphone / Microphone in Combo Jack
- 1 Micro HDMI v1.4 output (supports up to 1920 x 1080 @ 60 Hz)
- 1 Pogo-pin (6-pin) docking connector

#### Slots

1 MicroSD slot

## **SERVICE AND SUPPORT**

HP 1 year limited warranty. 1-year limited warranty on primary battery. Optional HP Care Packs <sup>2</sup> are extended service contracts which go beyond your standard limited warranties. For more details, visit: http://www.hp.com/go/lookuptool.

- 1. Sold separately or as an optional feature.
- 2. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product. 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/cpc.



## **Technical Specifications**

#### SYSTEM UNIT

**Stand-Alone Power Nominal Operating Voltage** 90Vac~264Vac **Requirements (AC Power)** 

Average Operating Power 45W

Max Operating Power 45W

**Temperature Operating** 0 to 35°C

Non-operating -20 to +85°C

**Relative Humidity Operating** 0% to 95%

Non-operating 0% to 95%

**Shock Operating** 10 G, 11ms, half sine

**Non-operating** 240 G peak, 2ms, half sine

**Random Vibration Operating** 0.75 grms

Non-operating 1.50 grms

**Altitude (unpressurized)** Operating 0 to 5,000 m (0 to 16,404 ft)

**Non-operating** 0 to 5,000 m (0 to 16,404 ft)

Yes

Planned Industry Standard UL
Certifications

CSA Yes
FCC Compliance Yes
ENERGY STAR® Support
EPEAT® Support
ICES Yes

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

### **DISPLAY**

10.1" diagonal WXGA Anti-glare WLED, eDP (1280 x 800) UWVA Ultra-Slim Touch **Outline Dimensions** 

 $(W \times H \times D)$ 

228.02(H) x 148.6(V) x 2.6 (panel) / 4.6 (panel+PCB) max.

**Active Area** 216.96(H)x135.6(V)

Weight 145q max (LCD only, without touch panel)

**Diagonal Size** 10.1" Touch Enabled Yes

TSP Type Direct Bonding

Surface Treatment BV, Anti-glare

Contrast Ratio 800:1 (typ)

Refresh Rate 60/40Hz

Response time 30ms typ.

Pixel Per Inch (PPI) 150



<sup>\*</sup> Configurations of the HP x2 210 G2 Detachable PC that are ENERGY STAR qualified are identified as HP x2 210 G2 Detachable PC ENERGY STAR on HP websites and on http://www.energystar.gov.

<sup>\*\*</sup> EPEAT registration varies by country. See http://www.epeat.net for registration status by country. EPEAT status listed above applies to U.S.

Brightness 250nit

Format RGB Pixel Resolution

**Configuration** Vertical Stripe

Interface eDP LCD Mode AHVA

**Viewing Angle** 85/85/85

**Note:** All display specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

## **NETWORKING/COMMUNICATIONS**

Intel® 802.11 a/b/g/n/ac Wireless LAN Standards (2x2) +Bluetooth® 4.2

Combo

IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac

**Interoperability** Wi-Fi certified **Frequency Band** 802.11b/g/n

• 2.402 – 2.482 GHz

#### Note:

The FCC has declared as of January 1, 2015 products that utilize passive scanning on channel 12/13 and are capable of transmitting must fully comply with requirements of 15.247 or otherwise disable those channels.

#### 802.11a/n

- 4.9 4.95 GHz (Japan)
- 5.15 5.25 GHz
- 5.25 5.35 GHz
- 5.47 5.725 GHz
- 5.825 5.850 GHz

Note: Indonesia no support this band

#### **Data Rates**

- 802.11b: 1, 2, 5.5, 11 Mbps
- 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
- 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
- 802.11n: MCS 0 ~ MCS 15, (20MHz, and 40MHz)
- 802.11ac: MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, and 80MHz)

**Modulation** Direct Sequence Spread Spectrum

BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM

Security<sup>1</sup>

- IEEE and WiFi compliant 64 / 128 bit WEP encryption for a/b/g mode only
- AES-CCMP: 128 bit in hardware
- 802.1x authentication
- WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES.



## **Technical Specifications**

- WPA2 certification
- IEEE 802.11i
- Cisco Certified Extensions, all versions through CCX4 and CCX Lite
- WAPI

**Network Architecture** 

Models Roaming Ad-hoc (Peer to Peer)

Infrastructure (Access Point Required)

IEEE 802.11 compliant roaming between access points

Output Power<sup>2</sup>

802.11b: +16dBm minimum

802.11g: +14dBm minimum

802.11a: +14dBm minimum

802.11n HT20(2.4GHz): +14dBm minimum

802.11n HT40(2.4GHz): +12dBm minimum

802.11n HT20(5GHz): +14dBm minimum

802.11n HT40(5GHz): +12dBm minimum

**Power Consumption** Transmit:

Receive: 1.6 W (max)

Idle mode (PSP): 180 mW (WLAN Associated)
Idle mode: 50 mW (WLAN unassociated)
Connect Standby: 10 mW (WLAN+BT)

Radio disabled: 5 mW

**Power Management** ACPI and PCI Express compliant power management

802.11 compliant power saving mode

2.0 W (max)

**Receiver Sensitivity**<sup>3</sup> 802.11b, 1Mbps: -94dBm maximum

802.11b, 11Mbps: -86dBm maximum 802.11g, 6Mbps: -88dBm maximum 802.11g, 54Mbps: -74dBm maximum 802.11a, 6Mbps: -88dBm maximum 802.11a, 54Mbps: -74dBm maximum 802.11n, MCS07: -69dBm maximum 802.11n, MCS15: -66dBm maximum 802.11ac, 1SS, MCS-0: -86dBm maximum 802.11ac, 2SS, MCS-0: -83dBm maximum

802.11ac, 2SS, MCS-9: -58dBm maximum

Antenna type

High efficiency antenna with spatial diversity, mounted in the display

enclosure

Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications

Form Factor PCI-Express M.2 MiniCard

**Dimensions** Type 2230 : 2.3 x 22.0 x 30.0 mm

Ôr

Type 1630: 2.3 x 16.0 x 30.0 mm

**Weight** Type 2230 : 2.8q

0r



## **Technical Specifications**

Type 1630: 2g

Operating Voltage 3.3v +/- 9%

**Temperature**Operating
14° to 158° F (-10° to 70° C)
Non-operating
-40° to 176° F (-40° to 80° C)

**Humidity** Operating 10% to 90% (non-condensing)

Non-operating 5% to 95% (non-condensing)

**Altitude** Operating 0 to 10,000 ft (3,048 m)

Non-operating 0 to 50,000 ft (15,240 m)

**LED Activity** LED Amber – Radio OFF; LED White – Radio ON

1. Check latest software/driver release for updates on supported security features.

2. Maximum output power may vary by country according to local regulations.

Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation).

#### HP Integrated Module with Bluetooth 4.0/4.1/4.2 Wireless Technology

**Bluetooth Specification** 4.0/4.1/4.2 Compliant **Frequency Band** 2402 to 2480 MHz

Number of AvailableLegacy : 0~79 (1 MHz/CH)ChannelsBLE : 0~39 (2 MHz/CH)

**Data Rates and**Legacy: 3 Mbps data rate; throughput up to 2.17 Mbps **Throughput**BLE: 1 Mbps data rate; throughput up to 0.2 Mbps

Legacy: Synchronous Connection Oriented links up to 3, 64 kbps, voice

channels

Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps

asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)

**Transmit Power** The Bluetooth component shall operate as a Class II Bluetooth device with

a maximum transmit power of + 4 dBm for BR and EDR.

#### **POWER**

45W USB Type-C<sup>™</sup> A C adapter

**Dimensions** (H x W x D) 107x47x30mm (Max. size)

 Weight
 200g +/-10%

 Input
 90Vac ~ 264Vac

**Input Efficiency** Average Efficiency of 25%, 50%, 75%, 100%

load condition with 115Vac/230Vac Spec:

5V:78.71% 12V:87.41% 15V:87.73%

**Input frequency range** 47 ~ 63Hz

Input AC current Input: 90V /47Hz; Output: 15V / 3A 45W

Input AC current 1.4A (max)

Output Output power 5V/10W

12V/36W 15V/45W

**DC output** 5V / 12V / 15V

**Hold-up time** 5ms



## **Technical Specifications**

Output current limit 5V/2A

12V/3A 15V/3A

**Connector** USB TYPE C Connector

**Environmental Design** Operating 0 to  $35^{\circ}$ C

temperature

Non-operating (storage)  $-20 \text{ to } +85 ^{\circ}\text{C}$ 

temperature

Altitude 5,000m above sea level.

Humidity 95 percent, non-condensing.

**Storage Humidity** 95 percent, non-condensing.

**EMI and Safety** CE Mark - full compliance with LVD and EMC directives; Worldwide safety Standards - IEC60950, EN60950, UL60950, Class1, SELV; Agency approvals

- C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE; Reliability - failure rate of less than 0.1% annually

within the first three years of operation.

Lithium Polymer battery (32.5 WHr)

**Dimensions**  $(H \times W \times L)$ 

3.5mm\*124.85mm\*169.9mm

(0.14in\*4.92in\*6.69in)

**Weight** 0.135kg+/-0.010kg

(0.3lb+/-0.02lb)

Cells/Type Lishen SP2982B1SF/LGC ICP2982111L1;3cells

**Energy Voltage** 7.7V

Amp-hour capacity 4.23Ah
Watt-hour capacity 32.5Wh
Operating (Charging) 0°C~ 45°C

Temperature Operating (Charging)  $0^{\circ}$ C~  $45^{\circ}$ C Operating (Discharging)  $-10^{\circ}$ C~  $60^{\circ}$ C

Non-operating -20°C~ 60°C1 Month

Fuel Gauge LED No LED Warranty 3 years Optional Travel Battery No

Available

## **COUNTRY OF ORIGIN**

China

#### **ENVIRONMENTAL**

**TBD** 



Options and Accessories (sold separately and availability may vary by country)

Туре	Description	Part Number
Cases	HP Essential Backpack (up to 15.6")	H1D24AA
	HP Slim Ultrabook Messenger (up to 15.6" x .88"/22/5mm)	F3W14AA
	HP Slim Ultrabook Top Load (up to 15.6" x .88"/22/5mm)	F3W15AA
	HP Slim Ultrabook Backpack (up to 15.6" x .88"/22/5mm)	F3W16AA
	HP Elite Top Load Leather Case <sup>1</sup>	T9H72AA
	HP Top Load Nylon Case <sup>1</sup>	T9H73AA
Docking	HP Elite USB Type-C™ Docking Station (USB-A)	T3V74AA
	HP USB Travel Dock(USB-A)	TOK30AA
	HP 3005pr USB 3 Port Replicator(USB-A)	H1L08AA
Input/Output	HP Slim USB Keyboard and Mouse	T6T83AA
	HP 3-Button Laser Mouse	H4B81AA
	HP Ultrathin Wireless Mouse	L9V78AA
	HP 2.4 GHz Wireless Mouse	LOZ84AA
	HP Stereo 3.5mm Headset	T1A66AA
	HP Stereo USB Headset	T1A67AA
	HP Conferencing Keyboard	K8P74AA
	HP Speaker UC Phone	K7V16AA
	HP Wired UC Headset	K7V17AA
	HP Slim Wireless Keyboard and Mouse	T6L04AA
	USB Graphics Adapter	NL571AT
	HP Pro Tablet 408 Active Pen	K8P73A
Adapter	USB 3.0 to GigLAN/USB	N7P47AA
	HP MicroHDMI to HDMI/VGA	K8E31AA
	HP Wireless Display Adapter	J1V25AA
	HP 45W USB Type-CTM AC Adapter	V5Y26AA#ABA
	HP External USB Optical Drive	F2B56AA

**NOTE 1:** North America Only.

# **Summary of Changes**

Date of change:	Version 1 to 2:	Description of change:

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