

Overview

HP Pro c640 Chromebook Enterprise



1. Microphones (2)
2. Camera LED
3. Privacy Camera
4. HD Camera
5. Touch pad

Left

6. Nano Security Lock Slot
7. USB-C™ 3.1 Gen 1 (Support charging, Power delivery, Video, Data)
8. HDMI 1.4
9. USB Type-A™ 3.1 Gen1 Port

Overview



Right

1. Power Button
2. USB Type-A™ 3.1 Gen1 Port
3. USB-C™ 3.1 Gen 1 (Support charging, Power delivery, Video, Data)
4. Stereo Headphone / Microphone Combo Jack
5. MicroSD™ Memory Card Reader
6. Fingerprint Sensor (select models)

Overview

AT A GLANCE

- Includes Chrome Enterprise Upgrade for better manageability and security
- Supports 10th Generation Intel® Core™ Processors
- Up to 16 GB memory and 128 GB eMMC storage options
- Data transfer in dense classroom environments by having Wi-Fi 6 2X2 ax WLAN with MU-MIMO and HP Extended Range Wireless LAN design
- Sleek design with aluminum cover & narrow border display
- Audio by B&O
- HP Privacy Camera to physically cover the webcam and mic.
- Optional Fingerprint Sensor³ (select models) for seamless login
- Optional backlit keyboard for working in dark environment
- Optional touchscreen for intuitive interactions
- HP Fast Charge Technology with long battery life for supporting your long work day²
- One HDMI port for instant collaboration without dongles
- Support HP USB Type-C® docks and docking monitors
- Support up to 3/3/0 warranty
- Undergoes MIL-STD 810 G Tests¹
- Easy to carry around - 16.5 mm height plus 1519 g weight

1. MIL-STD-810G testing is not intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Pack.
2. Recharges up to 90% within 90 minutes when the system is off or in standby mode when used with the power adapter provided with the notebook. After charging has reached 90% capacity, charging speed will return to normal. Charging time may vary +/-10% due to System tolerance.
3. HP Fingerprint Sensor is an optional feature and requires configuration at purchase.

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

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

PRODUCT NAME

HP Pro c640 Chromebook Enterprise

OPERATING SYSTEM

Preinstalled Chrome OS™ 64 with Chrome Enterprise Upgrade

PROCESSOR

Intel® Pentium® Gold 6405U Processor with Intel® UHD Graphics
(2.4 GHz base frequency, 2 MB L3 cache, 2 cores)^{1,2,3}

Intel® Core™ i3-10110U Processor with Intel® UHD Graphics
(2.1 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 4 MB L3 cache, 2 cores)^{1,2,3}

Intel® Core™ i5-10310U Processor with Intel® UHD Graphics
(1.6 GHz base frequency, up to 4.4 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores)^{1,2,3}

Intel® Core™ i7-10610U Processor with Intel® UHD Graphics
(1.8 GHz base frequency, up to 4.9 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores)^{1,2,3}

Processor Family

10th Generation Intel® Core™ i7 processor (i7-10610U)

10th Generation Intel® Core™ i5 processor (i5-10310U)

10th Generation Intel® Core™ i3 processor (i3-10110U)

Intel® Pentium® processor

1. Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.

2. Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.

3. Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See <http://www.intel.com/technology/turboboost> for more information.

CHIPSET

Chipset is integrated with processor

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

GRAPHICS

Integrated

Intel® UHD Graphics⁴

Supports

Support HD decode, DX12, HDMI 1.4b

4. HD content required to view HD images.

DISPLAY

Non-Touch

35.56 cm (14") diagonal HD SVA anti-glare micro-edge WLED-backlit, 220 nits, 45% NTSC (1366 x 768)^{4,5,6}

35.56 cm (14") diagonal FHD UWVA anti-glare micro-edge WLED-backlit, 250 nits, 45% NTSC (1920 x 1080)^{4,5,6}

Touch

35.56 cm (14") diagonal FHD UWVA anti-glare On-Cell micro-edge WLED-backlit touch screen, 250 nits, 45% NTSC (1920 x 1080)^{4,5,6}

35.56 cm (14") diagonal HD SVA anti-glare On-Cell micro-edge WLED-backlit touch screen, 220 nits, 45% NTSC (1366 x 768)^{4,5,6}

HDMI

HDMI v1.4b supporting; up to 1920 x 1080

Displays support

support extended displays through HP docks

Display Size

14"

35.56 cm (14")

4. HD content required to view HD images.

5. Resolutions are dependent upon monitor capability, and resolution and color depth settings.

6. Sold separately or as an optional feature.

STORAGE AND DRIVES

Primary Storage

32 GB eMMC 5.0⁷

64 GB eMMC 5.0⁷

128 GB eMMC 5.0⁷

7. For storage drives, GB = 1 billion bytes. Actual formatted capacity is less. Up to 8.1 GB is not user available

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

MEMORY

Maximum Memory

16 GB LPDDR4-2666 SDRAM

Memory

8 GB LPDDR4-2666 SDRAM

16 GB LPDDR4-2666 SDRAM

Memory Slots

On-board system memory

Supports Dual Channel Memory

NETWORKING/COMMUNICATIONS

WLAN

Intel® Wi-Fi 6 AX201 802.11a/b/g/n/ac/ax (2x2) Wi-Fi® and Bluetooth® 5 Combo, non-vPro™ (Support MU-MIMO and HP Extended Range Wireless LAN)⁸

Chromecast

Chromecast Support⁹

8. Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 (802.11ax) are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11 ax devices. Only available in countries where 802.11 ax is supported.

9. Chromecast must be purchased separately.

AUDIO/MULTIMEDIA

Audio

HD Audio

Dual stereo Speakers

B&O Play

Camera

720p HD Camera⁴

Privacy Camera

4. HD content required to view HD images.

KEYBOARD / POINTING DEVICES

Keyboard

Full-size Textured island-style Chrome keyboard, Pike Silver, spill resistant

Full-size3-coat painted island-style Chrome keyboard for FPS, backlit, Pike Silver, spill resistant¹⁰

Pointing Device

Multi-touch gesture support, taps enabled as default

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

10. Backlit keyboard is an optional feature that must be configured at purchase.

SOFTWARE AND SECURITY

Preinstalled Software

Store up to 100 GB with Google Drive (2-year subscription included)¹¹

Google G Suite

Google Play Store

Manageability Features

Chrome Enterprise Upgrade¹²

Security Management

Google H1 Security Chip

Nano Security Lock Slot

HP Fingerprint Sensor (select models)¹³

11. Google Drive offer is tied to this device and is non-transferable. If this device is returned, the extra storage will be revoked. In order to redeem this offer, you will need to be on Chrome OS™ 23 or later. Internet access is required and not included. Additional information about storage plan refunds, renewals, cancellations and expiration is available at the Google website: <https://support.google.com/chromebook/answer/2703646?hl=en>.

12. Requires one-time setup, subscription, Google Admin Console, and your organization's domain. Please see <https://support.google.com/a/answer/60216>.

13. HP Fingerprint Sensor is an optional feature and requires configuration at purchase.

POWER

Power Supply

AC Adapter 45 Watt nPFC Standard USB type C™ Straight¹⁴

AC Adapter 65 Watt nPFC Standard USB type C™ Straight¹⁴

Primary Battery

HP Long Life 3-cell, 60 Wh Li-ion; supports fast charge¹⁵

Power Cord

3-wire plug - 1.0 m

Battery life

Up to 12 hours¹⁶

Battery Weight

0.22 kg

0.49 lb

14. Availability may vary by country.

15. Battery is internal and not replaceable by customer. Serviceable by warranty.

16. Testing conducted by HP using Google Chrome OS power_LoadTest. Battery life will vary and the maximum capacity of the battery will naturally decrease with time and usage. See <http://www.chromium.org/chromium-os/testing/power-testing> for test details. Full charge battery life will decrease after Adaptive Battery Optimizer activation. will naturally decrease with

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

time and usage. See <http://www.bapco.com> for additional details.

WEIGHTS & DIMENSIONS

Product Weight

Starting at 3.4 lb¹⁷

Starting at 1.5 kg¹⁷

Product Dimensions (w x d x h)

12.8 x 8.07 x 0.65

32.5 x 20.5 x 1.65

17. Weight will vary by configuration. Does not include power adapter.

PORTS/SLOTS

Ports

2 USB 3.1 Type-C™ Gen 1 (Power delivery, DisplayPort™)

2 USB 3.1 Type-A Gen 1

1 HDMI 1.4¹⁸

1 Stereo Headphone/Microphone Combo Jack

Expansion Slots

1 MicroSD™ Memory Card Reader Supporting SD, SDHC, SDXC

18. HDMI cable sold separately.

SERVICE AND SUPPORT

HP Services offers 1-year and 3-year limited warranties and 90 day software limited warranty options depending on country. Batteries have a default one year limited warranty except for long-life batteries which will have the same one or three year warranty as the platform. Refer to <http://www.hp.com/support/batterywarranty/> for additional battery information. On-site service and extended coverage is also available. HP Care Pack Services are optional extended service contracts that go beyond the standard limited 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/cpc>.¹⁹

19. HP Care Packs are sold separately. 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. For details, visit <http://www.hp.com/go/cpc>. 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.

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

SYSTEM UNIT

Stand-Alone Power Requirements (AC Power)	USB-C 45 W and 65 W adapter	
	Nominal Operating Voltage	5V/9V/12V/15V
	Average Operating Power	<45 W
	Integrated Graphics	Yes
	Max Operating Power	UMA <45 W
Temperature	Operating	32° to 95° F (0° to 35° C)
	Non-operating	41° to 95° F (5° to 35° C)
Relative Humidity	Operating	10% to 90%
	Non-operating	5% to 95%
Shock	Operating	40 G, 2 ms, half-sine
	Non-operating	240 G, 2 ms, half-sine
Random Vibration	Operating	1.043 grms
	Non-operating	3.5 grms
Altitude (unpressurized)	Operating	-50 to 10,000 ft (-15 to 3,048 m)
	Non-operating	-50 to 40,000 ft (-15 to 12,192 m)
Planned Industry Standard Certifications	UL	Yes
	FCC Compliance	Yes
	ENERGY STAR®	Yes ²⁰
	EPEAT® 2019	Yes, Silver in U.S. ²¹
	ICES	Yes
	Australia /	Yes
	NZ RCM Compliance	Yes
	CCC	Yes
	KC	Yes
	BSMI	Yes
	CE Marking Compliance	Yes
	EAC	Yes
	Saudi Arabian Compliance (ICCP)	Yes
SABS	Yes	

20. Configurations of the HP Pro c640 Chromebook Enterprise that are ENERGY STAR® certified are identified as HP Pro c640 Chromebook Enterprise ENERGY STAR on HP websites and on <http://www.energystar.gov>.

21. Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit <http://www.epeat.net> for more information.

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

DISPLAYS

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

14.0" diagonal HD (1366 x 768) SVALED- backlight 45% NTSC 220 nits	Outline Dimensions (W x H x D)	316.2 x 186 (mm) max
	Active Area	309.4 x 173.95 (mm)
	Weight	280 g max.
	Diagonal Size	14.0 (inch)
	Thickness	3.0 (mm) max
	Interface	eDP 1.2
	Pixel Resolution	1366 x 768 (HD)
	Format of LCD Pixel Arrangement	RGB
	Backlight	LED
	Color Gamut Coverage	45% of NTSC
	Color Depth	6 bits
	Viewing Angle	45/45/20/45
14.0" diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 45% NTSC 250 nits eDP slim Touch on Panel NWBZ	Outline Dimensions (W x H x D)	316.17 x 198.07 (mm) max
	Active Area	309.37 x 174.02 (mm)
	Weight	290 g max.
	Diagonal Size	14.0 (inch)
	Thickness	3.0 mm (Panel Side) / 3.2 mm (PCBA Side) max.
	Interface	eDP 1.2
	Surface Treatment	Anti-glare (AG)
	Touch Enabled	Yes
	Contrast Ratio	600:1 (typical)
	Refresh Rate	60 Hz
	Brightness	250 nit typical
	Pixel Resolution	1920 x 1080 (FHD)
14.0" diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 45% NTSC 250 nits eDP slim NB	Outline Dimensions (W x H x D)	316.17 x 197.98 (mm) max
	Active Area	309.37 x 174.02 (mm)
	Weight	285 g max.
	Diagonal Size	14.0 (inch)
	Thickness	3.0 mm max.
	Interface	eDP 1.2
	Surface Treatment	Anti-glare (AG)
	Touch Enabled	Yes
	Contrast Ratio	600:1 (typical)
	Refresh Rate	60 Hz
	Brightness	250 nit typical
	Pixel Resolution	1920 x 1080 (FHD)

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

Format of LCD Pixel Arrangement	RGB
Backlight	LED

STORAGE AND DRIVES*

eMMC 5.0	Drive Weight	0.2 g
	Rotation speed	32 GB/64 GB/128 GB
	Cache Buffer	1.4 mm
	Height	11.5 x 13 mm
	Width	MMC protocol
	Transfer Rate	Up to 250 MB/s
	Seek Time	Up to 70 MB/s
	Logical Blocks	32 GB (31,268,536,320 Bytes)/64 GB (62,537,072,640 Bytes)/128 GB (125,074,145,280 Bytes)
	Operating Temperature	0 to 70
	Security Features	HS400

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

NETWORKING/COMMUNICATIONS

<p>Intel® Wi-Fi 6¹ AX200 and Bluetooth® 5.0 802.11ax (2 x 2), non-vPro, supporting gigabit file transfer speeds non-vPro</p>	<p>Wireless LAN Standards</p> <ul style="list-style-type: none"> IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac IEEE 802.11ax IEEE 802.11d IEEE 802.11e IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v
<p>Interoperability</p>	<p>Wi-Fi CERTIFIED™</p>
<p>Frequency Band</p>	<ul style="list-style-type: none"> •802.11b/g/n/ax 2.402 – 2.482 GHz •802.11a/n/ac/ax 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
<p>Data Rates</p>	<ul style="list-style-type: none"> •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, 80MHz & 160MHz) • 802.11ax: MCS0 ~ MCS11, (1SS and 2SS) (20MHz, 40MHz, 80MHz & 160MHz)
<p>Modulation</p>	<p>Direct Sequence Spread Spectrum OFDM, BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM</p>
<p>Security³</p>	<ul style="list-style-type: none"> •IEEE 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. •WPA2 certification •IEEE 802.11i •WAPI
<p>Network Architecture Models</p>	<p>Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)</p>
<p>Roaming</p>	<p>IEEE 802.11 compliant roaming between access points</p>
<p>Output Power²</p>	<ul style="list-style-type: none"> • 802.11b: +18.5dBm minimum • 802.11g: +17.5dBm minimum

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

	<ul style="list-style-type: none"> • 802.11a: +18.5dBm minimum • 802.11n HT20(2.4GHz): +15.5dBm minimum • 802.11n HT40(2.4GHz): +14.5dBm minimum • 802.11n HT20(5GHz): +15.5dBm minimum • 802.11n HT40(5GHz): +14.5dBm minimum • 802.11ac VHT80(5GHz): +11.5dBm minimum • 802.11ac VHT160(5GHz): +11.5dBm minimum • 802.11ax HT40(2.4GHz): +10dBm minimum • 802.11ax VHT160(5GHz): +10dBm minimum
Power Consumption	<ul style="list-style-type: none"> • Transmit mode: 2.0 W • Receive mode: 1.6 W • Idle mode (PSP) 180 mW (WLAN Associated) • Idle mode: 50 mW (WLAN unassociated) • Connected Standby: 10 mW • Radio disabled: 8 mW
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode
Receiver Sensitivity⁴	<ul style="list-style-type: none"> • 802.11b, 1Mbps: -93.5dBm maximum • 802.11b, 11Mbps: -84dBm maximum • 802.11a/g, 6Mbps: -86dBm maximum • 802.11a/g, 54Mbps: -72dBm maximum • 802.11n, MCS07: -67dBm maximum • 802.11n, MCS15: -64dBm maximum • 802.11ac, MCS0: -84dBm maximum • 802.11ac, MCS9: -59dBm maximum • 802.11ax, MCS11(HT40): -59dBm maximum • 802.11ax, MCS11(VHT160): -58.5dBm 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 Type 1216: 1.67 x 12.0 x 16.0 mm
Weight	Type 2230: 2.8 g Type 1216: 1.3 g
Operating Voltage	3.3 v +/- 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 OFF – Radio ON

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

HP Integrated Module with Bluetooth 4.0/4.1/4.2/5.0/5.1 Wireless Technology

Bluetooth Specification	4.0/4.1/4.2/5.0/5.1 Compliant
Frequency Band	2402 to 2480 MHz
Number of Available Channels	Legacy: 0~79 (1 MHz/CH) BLE: 0~39 (2 MHz/CH)
Signaling Data Rate	Legacy: 3 Mbps signaling data rate ¹ 2.17 Mbps BLE: 1 Mbps signaling data rate 0.2 Mbps 1. Actual throughput may vary.
Transmit Power	Legacy: Synchronous Connection Oriented links, 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) The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 9.5 dBm for BR and EDR.

1. Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 (802.11ax) are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ax devices. Only available in countries where 802.11ax is supported.
2. The FCC has declared as of September 1, 2014 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.
3. Check latest software/driver release for updates on supported security features.
4. 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).

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

POWER

AC Adapter 65 Watt nPFC Standard USB type C™ Straight 1.8 m	Dimensions (H x W x D)	90 mm x 51 mm x 28.5 mm
	Weight	220 g +/-20% Not including power cord. Power cord varies by country
	Input	100 to 240 VAC
	Input Efficiency	Average Efficiency of 25%, 50%, 75%, 100% load condition with 115Vac/230Vac Spec: 5V: 81.5% 9V: 86.7% 12V: 88% 15V: 89% 20V: 89%
	Input frequency range	47 ~ 63Hz
	Input AC current	Max. 1.6 A at 90 Vac
	Output	5V/9V/12V/15V/20V
	Output power	65 W
	Hold-up time	5ms at 115 Vac input
	Output current limit	<8.0 A
	Connector	USB Type-C™
	Environmental Design	Operating temperature 32°F to 95°F (0°C to 35°C) Non-operating (storage) temperature -4°F to 185°F (-20°C to 85°C) Altitude 0 to 16,400 ft (0 to 5000m) Humidity 20% to 95% Storage Humidity 10% to 95%
	EMI and Safety Certifications	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. MTBF - over 200,000 hours at 25°C ambient condition.

AC Adapter 45 Watt nPFC Standard USB type C™ Straight	Dimensions (H x W x D)	95 mm x 43 mm x 27.5 mm
	Weight	200 g +/-10% Not including power cord. Power cord varies by country
	Input	100 to 240 VAC
	Input Efficiency	Average Efficiency of 25%, 50%, 75%, 100% load condition with 115Vac/230Vac Spec: 5V: 81.5% 9V: 86.7% 12V: 87.41% 15V: 87.8%
	Input frequency range	47 ~ 63Hz
	Input AC current	Max. 1.4 A at 90 Vac
	Output	5V/15W 9V/27W

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

	12V/36W 15V/45W	
	Output power	45 W
	DC output	5V/9V/12V/15V
	Hold-up time	5ms at 115 Vac input
	Output current limit	<5.0 A
Connector	USB Type-C™	
Environmental Design	Operating temperature	32°F to 95°F (0°C to 35°C)
	Non-operating (storage) temperature	-4°F to 185°F (-20°C to 85°C)
	Altitude	0 to 16,400 ft (0 to 5000m)
	Humidity	20% to 95%
	Storage Humidity	10% to 95%
EMI and Safety Certifications	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. MTBF - over 200,000 hours at 25°C ambient condition.	

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

Category	Description	Part Number
Cases	HP Business Slim Top Load	2UW02AA
	HP 14.0 Always On Black Case	3YF54AA
	HP Essential Top Load Case (up to 15.6")	H2W17AA
	HP Essential Backpack (up to 15.6")	H1D24AA
Docking	HP USB-C/A Universal Dock G2 <small>1. According to Chromebook hardware design, this platform can only support up to dual 4k displays through the dock. 2. According to Chrome OS limitation, the power button function of the dock will not be supportable. 3. Do not support HP Alt Mode</small>	5TW13AA
	HP USB-C Travel Dock G2	7PJ38AA
Input/output	HP 3-Button Laser Mouse	H4B81AA
	HP USB Optical Travel mouse	G1K28AA
	HP Bluetooth Travel Mouse	6SP30AA
	HP Essential USB Mouse	2TX37AA
	HP Stereo USB Headset	T1A67AA
	HP Stereo 3.5mm Headset	T1A66AA
	HP USB-C to DP	N9K78AA
	HP USB-C to HDMI 2.0 Adapter	1WC36AA
	HP USB-C to USB HUB	Z6A00AA
	HP USB to RJ45 Adapter	N7P47AA
	HP USB-C Travel Dock G2	7PJ38AA
HP USB-C to VGA Adapter	N9K76AA	
Power	HP 45 W USB-C G2 Power Adapter	1MZ01AA
	65 W USB-C Slim Power adapter	3PN48AA
	HP Notebook USB-C Power Bank	2NA10AA
Storage	HP External USB Optical Drive	F2B56AA
Security	HP Nano Keyed Cable Lock	1AJ39AA
	HP Sure Key Cable Lock	6UW42AA
Displays	HP E24d G4 Advanced Docking monitor	6PA50AA
	HP E27d G4 Advanced Docking monitor	6PA56AA

Summary of Changes

Date of change:	Version History:		Description of change:
	V1 to V2		

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