

Overview

HP Pro c640 Chromebook



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

At A Glance

- 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
- Bett conferencing experience with 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
- Supports HP USB Type-C® docks and docking monitors
- Supports 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

Overview

with the notebook. After charging has reached 90% capacity, charging speed will return to normal. Charging time may vary +/-10% due to System tolerance.

- 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

OPERATING SYSTEM

Preinstalled Chrome OSTM 64

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), supports Intel® Technology^{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), supports Intel® Technology^{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

GRAPHICS

- Integrated**
- Intel® UHD Graphics⁴
- Supports**
- Support HD decode, DX12, HDMI 1.4b

4. HD content required to view HD images.

DISPLAY

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

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 IPS anti-glare micro-edge WLED-backlit, 250 nits, 45% NTSC (1920 x 1080)^{4,5,6}

Touch

35.56 cm (14") diagonal FHD IPS 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

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

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

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 802.11ax devices.
9. Chromecast must be purchased separately.

AUDIO/MULTIMEDIA

Audio

HD Audio
Dual stereo Speakers
Audio by B&O

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

10. Backlit keyboard is an optional feature.

SOFTWARE AND SECURITY

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

Preinstalled Software

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

Manageability Features

Chrome Enterprise Upgrade^{12,13}

Security Management

Google H1 Security Chip
Nano Security Lock Slot¹²
HP Fingerprint Sensor (select models)¹⁴

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. Sold separately.

13. Chrome Enterprise Upgrade requires one-time setup, subscription, Google Admin Console, and your organization’s domain. Please see <https://support.google.com/a/answer/60216>.

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

POWER

Power Supply

AC Adapter 45 Watt nPFC Standard USB type C™ Straight¹⁵
AC Adapter 65 Watt nPFC Standard USB type C™ Straight¹⁵

Primary Battery

HP Long Life 3-cell, 60 Wh Li-ion; supports fast charge¹⁶

Power Cord

3-wire plug - 1.0 m

Battery life

Up to 12 hours¹⁷

Battery Weight

0.22 kg
0.49 lb

15. Availability may vary by country.
16. Battery is internal and not replaceable by customer. Serviceable by warranty.
17. 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.

WEIGHTS & DIMENSIONS

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

Product Weight

Starting at 3.35 lb¹⁸
Starting at 1.5 kg¹⁸

Product Dimensions (w x d x h)

12.8 x 8.07 x 0.65 in
32.5 x 20.5 x 1.65 cm

18. 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 1.4¹⁹
- 1 stereo headphone/microphone combo jack

Expansion Slots

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

19. 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>.²⁰

20. 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.

SYSTEM UNIT

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

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
Temperature	Max Operating Power	UMA <45 W
	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 ²¹
	EPEAT® 2019	Yes, Silver in U.S. ²²
	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

21.Configurations of the HP Pro c640 Chromebook that are ENERGY STAR® certified are identified as HP Pro c640 Chromebook ENERGY STAR on HP websites and on <http://www.energystar.gov>.
22. 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.

DISPLAYS

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

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

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)
	Format of LCD Pixel Arrangement	RGB
	Backlight	LED
	Color Gamut Coverage	45% of NTSC

14.0" diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 45% NTSC 250nits eDP slim NB	Color Depth	6 bits (Hi FRC supportive upon condition to enable)
	Viewing Angle	85/85/85/85

14.0" diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 45% NTSC 250nits 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)
	Format of LCD Pixel Arrangement	RGB
	Backlight	LED
	Color Gamut Coverage	45% of NTSC

14.0" diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 45% NTSC 250nits eDP slim NB	Color Depth	6 bits (Hi FRC supportive w/ condition to enable)
	Viewing Angle	UWVA 85/85/85/85

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

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
	Surface Treatment	Anti-glare (AG)
	Touch Enabled	None
	Contrast Ratio	500:1 (typical)
	Refresh Rate	60 Hz
	Brightness	220 nit typical
	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

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

NETWORKING/COMMUNICATIONS

Intel® Wi-Fi 6¹ AX200 and Bluetooth® 5.0 802.11ax (2 x 2), non-vPro, supporting gigabit file transfer speeds non-vPro	Wireless LAN Standards	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
		Wi-Fi CERTIFIED™
		● 802.11b/g/n/ax 2.402 - 2.482 GHz
		● 802.11a/n/ac/ax 4.9 - 4.95 GHz (Japan)
	Interoperability	
	Frequency Band	

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

	5.15 - 5.25 GHz 5.25 - 5.35 GHz 5.47 - 5.725 GHz 5.825 - 5.850 GHz
Data Rates	<ul style="list-style-type: none">802.11b: 1, 2, 5.5, 11 Mbps802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps802.11n: 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)
Modulation	Direct Sequence Spread Spectrum OFDM, BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
Security ³	<ul style="list-style-type: none">IEEE and Wi-Fi compliant 64 / 128 bit WEP encryption for a/b/g mode onlyAES-CCMP: 128 bit in hardware802.1x authenticationWPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES.WPA2 certificationIEEE 802.11iWAPI
Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
Roaming	IEEE 802.11 compliant roaming between access points
Output Power ²	<ul style="list-style-type: none">802.11b: +18.5dBm minimum802.11g: +17.5dBm minimum802.11a: +18.5dBm minimum802.11n HT20(2.4GHz): +15.5dBm minimum802.11n HT40(2.4GHz): +14.5dBm minimum802.11n HT20(5GHz): +15.5dBm minimum802.11n HT40(5GHz): +14.5dBm minimum802.11ac VHT80(5GHz): +11.5dBm minimum802.11ac VHT160(5GHz): +11.5dBm minimum802.11ax HT40(2.4GHz): +10dBm minimum802.11ax VHT160(5GHz): +10dBm minimum
Power Consumption	<ul style="list-style-type: none">Transmit mode: 2.0 WReceive mode: 1.6 WIdle mode (PSP) 180 mW (WLAN Associated)Idle mode: 50 mW (WLAN unassociated)Connected Standby: 10 mWRadio disabled: 8 mW
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode
Receiver Sensitivity ⁴	<ul style="list-style-type: none">802.11b, 1Mbps: -93.5dBm maximum802.11b, 11Mbps: -84dBm maximum802.11a/g, 6Mbps: -86dBm maximum802.11a/g, 54Mbps: -72dBm maximum802.11n, MCS07: -67dBm maximum802.11n, MCS15: -64dBm maximum802.11ac, MCS0: -84dBm maximum

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

	<ul style="list-style-type: none">802.11ac, MCS9: -59dBm maximum802.11ax, MCS11(HT40): -59dBm maximum802.11ax, 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 126: 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

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).

POWER

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

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	
	Output	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
		5V/9V/12V/15V/20V	
		Output power	65 W
		Hold-up time	5ms at 115 Vac input
	Connector	Output current limit	<8.0 A
		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	
	Output	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
		5V/15W 9V/27W 12V/36W 15V/45W	
		Output power	45 W
		DC output	5V/9V/12V/15V
	Connector	Hold-up time	5ms at 115 Vac input
		Output current limit	<5.0 A
	Environmental Design	USB Type-C™	
		Operating temperature	32°F to 95°F (0°C to 35°C)

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

	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.

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 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	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
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

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



Summary of Changes

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

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