

Overview

HP Elite c1030 Chromebook



Left

1. Microphones
2. HD Camera
3. Touch pad
4. HP Privacy Switch
5. Volume Control Button
6. Power Button
7. Nano Security Lock Slot (Lock sold separately)
8. USB-C® 3.2 Gen 1 (Support charging, Power delivery, Video, Data)
9. Stereo Headphone / Microphone Combo Jack

Overview



Right

1. USB Type-A™ 3.2 Gen1 Port
2. USB-C® 3.1 Gen 1 (Support charging, Power delivery, Video, Data)
3. MicroSD™ Memory Card Reader
4. Fingerprint Sensor

Overview

AT A GLANCE

- Supports up to 10th Gen Intel® Core™ i7 Processor
- Up to 16 GB memory and 256 GB PCIe SSD storage options
- World's highest screen-to-body ratio (90.1%) in a Chromebook and with 3:2 FHD touchscreen
- 75% recycled aluminum front cover and recycled materials on the keyboard, speaker and packaging
- Easy to carry around - 16.1 mm height & 1300 g weight
- Instantly block prying eyes by optional HP Sure View Reflect
- Skip the passwords and enjoy fast unlock with the integrated fingerprint sensor
- Physically blackscreen your webcam with the handy privacy switch on the side of the keyboard
- Backlit keyboard
- Audio by Bang & Olufsen
- Greater speed and stability on crowded networks with 2x2 ax wireless and HP Extended Range Wireless LAN
- Connect with optional LTE
- HP Fast Charge Technology with long-life battery for supporting your long workday¹
- Undergo 19 MIL-STD 810H² Tests and with a keyboard that resists spills
- Intuitively take notes with the optional, high-performance USI active pen that can magnetically attach to your PC³
- Support HP USB Type-C® 3.2 Gen 1 docks and docking monitors
- Support up to 3/3/0 warranty

1. 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.

2. MIL-STD-810H 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.

3. USI active pen is an optional feature.

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 Elite c1030 Chromebook

OPERATING SYSTEM

Preinstalled Chrome OS™ 64

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

PROCESSOR

Intel® Core™ i3 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)^{1,2,3,4}

Intel® Core™ i5 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^{1,2,3,4}

Intel® Core™ i7 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^{1,2,3,4}

Processor Family

10th Generation Intel® Core™ i7 processor (i7-10610U)⁴

10th Generation Intel® Core™ i5 processor (i5-10310U)⁴

10th Generation Intel® Core™ i3 processor (i3-10110U)⁴

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.

4. In accordance with Microsoft's support policy, HP does not support the Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any Windows 8 or Windows 7 drivers on <http://www.support.hp.com>.

CHIPSET

Chipset is integrated with processor

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

GRAPHICS

Integrated

Intel® UHD Graphics⁵

Supports

Support HD decode, DX12, HDMI 1.4b⁵

5. HD content required to view HD images.

DISPLAY

Touch

34.29 cm (13.5") diagonal FHD IPS eDP + PSR anti-glare micro-edge WLED-backlit ultraslim touch screen with HP Sure View Gen4 integrated privacy screen, 1000 nits, 72% NTSC (1920 x 1280)^{5,6,7}

34.29 cm (13.5") diagonal FHD anti-glare WLED-backlit Bend Type touch screen, 400 nits, 72% NTSC (1920 x 1280)^{5,6}

34.29 cm (13.5") diagonal FHD BrightView WLED-backlit Bend Type touch screen, 400 nits, 72% NTSC (1920 x 1280)^{5,6}

HDMI

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

Displays support

support extended displays through HP docks

5. HD content required to view HD images.

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

7. HP Sure View G4 integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.

STORAGE AND DRIVES

Primary M.2 Storage

128 GB PCIe® NVMe™ M.2 SSD⁸

256 GB PCIe® NVMe™ M.2 SSD⁸

8. For storage drives, GB = 1 billion bytes. Actual formatted capacity is less.

MEMORY

Maximum Memory

16 GB DDR4-2666 SDRAM

Memory

8 GB DDR4-2666 SDRAM

16 GB DDR4-2666 SDRAM

Memory Slots

On-board system memory

Supports Dual Channel Memory

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

NETWORKING/COMMUNICATIONS

WLAN

Intel® Wi-Fi 6 AX201 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 Combo, non-vPro™ (Support MU-MIMO and HP Extended Range Wireless LAN)⁹

WWAN

Intel® XMM™ 7360 LTE-Advanced Cat 9

Chromecast

Chromecast Support¹⁰

9. 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

10. Chromecast must be purchased separately.

AUDIO/MULTIMEDIA

Audio

HD audio

Dual stereo speakers

Audio by Bang & Olufsen

Camera

720p HD camera with Privacy Switch⁵

5. HD content required to view HD images.

KEYBOARD / POINTING DEVICES

Keyboard

Full-size Textured island-style Chrome keyboard, Flint Silver, backlit, spill resistant¹¹

Full-size Textured island-style Chrome keyboard, Flint Silver, backlit, spill resistant, HP Sure View Reflect¹¹

Pointing Device

Clickpad with Soda-lime Glass

Multi-touch gesture enabled, taps enabled as default

Function Keys



Go to the previous page



Refresh your current page



Make your page take up the full screen













Show all your open windows



Switch to extend mode

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

-  Decrease screen brightness
-  Increase screen brightness
-  Decrease keyboard brightness
-  Increase keyboard brightness
-  Play/Pause
-  Mute
-  Lower the volume
-  Raise the volume
-  Lock screen
-  Enable HP Sure View Reflect

Pen

HP active USI Pen (Optional)

11. Backlit keyboard is an optional feature.

SOFTWARE AND SECURITY

Security Management

Google Titan C

Fingerprint Sensor

Nano security lock slot¹²

HP Sure View Reflect (optional)

12. Lock is sold separately.

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

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

POWER

Power Supply

AC Adapter 45 Watt nPFC Standard USB Type-C® Straight¹³

AC Adapter 65 Watt nPFC Standard USB Type-C® Straight¹³

Primary Battery

HP Long Life 4-cell, 50 Wh Li-ion polymer¹⁴

Power Cord

3-wire plug – 1.0 m

Battery life

Up to 12 hours¹⁵

Support HP Fast Charge Technology (90 mins to 90%)¹⁶

Battery Weight

0.22 kg

0.49 lb

13. Availability may vary by country.

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

15. 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.

16. Recharges the battery up to 90% within 90 minutes when the system is off or in standby mode. Power adapter with a minimum capacity of 65 watts is required. After charging has reached 50% capacity, charging will return to normal. Charging time may vary +/-10% due to System tolerance.

WEIGHTS & DIMENSIONS

Product Weight Imperial

With WLAN: Starting at 2.87 lb¹⁷

With WWAN: Starting at 2.99 lb¹⁷

Product Weight Metric

With WLAN: Starting at 1.33 kg¹⁷

With WWAN: Starting at 1.36 kg¹⁷

Product Dimensions Imperial (w x d x h)

11.6 x 8.5 x 0.6 in (with BrightView display)

11.6 x 8.5 x 0.7 in (with anti-glare display)

Product Dimensions Metric (w x d x h)

29.5 x 21.7 x 1.61 cm (with BrightView display)

29.5 x 21.7 x 1.67 cm (with anti-glare display)

17. Weight will vary by configuration.

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

PORTS/SLOTS

Ports

- 2 USB 3.2 Type-C® (Charge and video support, data transfer, power delivery)
- 1 USB-A 3.2 Gen 1
- 1 Stereo Headphone/Microphone Combo Jack

Expansion Slots

- 1 micro SD
 - 1 multi-format digital media reader
- Supports SD, SDHC, SDXC

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 battery. 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>.¹⁸

18. 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 65W adapter
	Nominal Operating Voltage 5V/9V/12V/15V
	Average Operating Power 45W/65W
	Integrated Graphics Yes
	Max Operating Power < 45 W
Temperature	Operating 41° to 95° F (5° to 35° C)
	Non-operating 32° to 95° F (0° 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
	CSA No
	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
	Japan VCCI Compliance Yes
	KC Yes
	BSMI Yes
	CE Marking Compliance Yes
	BNCI or BELUS No
	CIT No
	EAC Yes
	Saudi Arabian Compliance (ICCP) Yes
SABS Yes	
UKRSERTCOMPUTER No	

20. Configurations of the HP Elite c1030 Chromebook that are ENERGY STAR® qualified are identified as HP Elite c1030 Chromebook 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.

Panel LCD 13.5-in diagonal WUXGA+ (1920 x 1280) BrightView WLED UWVA sRGB 100% NTSC 400 nits eDP 1.4+PSR2 Ultraslim NB2Z	Outline Dimensions (W x H x D)	291.20 x 200.0 (mm) max
	Active Area	284.8896 x 189.9264 (mm)
	Weight	187g max.
	Diagonal Size	13.5 (inch)
	Thickness	2.05 (panel body) / 3.85 (panel+PCB) (mm) max
	Interface	eDP 1.4
	Surface Treatment	Anti-glare (AG)
	Touch Enabled	None
	Contrast Ratio	1500:1 (typical)
	Refresh Rate	60Hz
	Brightness	400 nit typical (Panel Only)
	Pixel Resolution	1920 x 1280 (FHD)
	Format of LCD Pixel Arrangement	RGB
	Backlight	LED
	Color Gamut Coverage	sRGB 100%
	Color Depth	8 bits
Viewing Angle	UWVA 85/85/85/85	

Panel LCD 13.5-in diagonal WUXGA+ (1920 x 1280) Anti-Glare WLED UWVA 72% NTSC 1000 nits eDP 1.4+PSR PrivacyG4 NB2Y bent	Outline Dimensions (W x H x D)	290.19 x 201.23 (mm) max
	Active Area	284.89 x 189.93 (mm)
	Weight	240g max.
	Diagonal Size	13.5 (inch)
	Thickness	3.9 (mm) max
	Interface	eDP 1.4
	Surface Treatment	Anti-glare (AG)
	Touch Enabled	None
	Contrast Ratio	1500:1 (typical)
	Refresh Rate	60Hz
	Brightness	1000 nits
	Pixel Resolution	1920 x 1280 (WUXGA+)
	Format of LCD Pixel Arrangement	RGB
	Backlight	LED
	Color Gamut Coverage	sRGB 100%
	Color Depth	8 bits
Viewing Angle	UWVA 85/85/85/85	

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

STORAGE AND DRIVES*

SSD 128 GB 2230 PCIe NVMe Value	Form Factor	M.2 2230
	Capacity	128 GB
	NAND Type	TLC
	Height	0.09 in (2.3 mm)
	Width	0.87 in (22 mm)
	Interface	PCIe NVMe Gen3X4 or PCIe NVMe Gen3X2
	Maximum Sequential Read	Up to 2100 MB/s
	Maximum Sequential Write	Up to 1200 MB/s
	Logical Blocks	250,069,680
	Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]
	Features	Pyrite

SSD 256 GB 2230 PCIe NVMe Value	Form Factor	M.2 2230
	Capacity	256 GB
	NAND Type	TLC
	Height	0.09 in (2.3 mm)
	Width	0.87 in (22 mm)
	Interface	PCIe NVMe Gen3X4 or PCIe NVMe Gen3X2
	Maximum Sequential Read	Up to 2100 MB/s
	Maximum Sequential Write	Up to 1200 MB/s
	Logical Blocks	250,069,680
	Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]
	Features	Pyrite

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

NETWORKING/COMMUNICATIONS

Intel Wi-Fi 6¹ AX201 and Bluetooth® 5.0 (802.11ax 2x2, 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
	Interoperability	Wi-Fi CERTIFIED™
	Frequency Band	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
	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, 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, 1024QAM
	Security³	•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
	Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	Roaming	IEEE 802.11 compliant roaming between access points
	Output Power²	• 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/Modern 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 with CNVi Interface
Dimensions	<ol style="list-style-type: none"> 1. Type 2230: 2.3 x 22.0 x 30.0 mm 2. Type 1216: 1.67 x 12.0 x 16.0 mm
Weight	<ol style="list-style-type: none"> 1. Type 2230: 2.8 g 2. Type 126: 1.3 g
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 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 data rate; throughput up to 2.17 Mbps 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 + 9.5 dBm for BR and EDR.
Power Consumption	Peak (Tx): 330 mW Peak (Rx): 230 mW Selective Suspend: 17 mW
Bluetooth Software Supported	Microsoft Windows Bluetooth Software
Link Topology	
Power Management	Microsoft Windows ACPI, and USB Bus Support
Certifications	FCC (47 CFR) Part 15C, Section 15.247 & 15.249
Power Management Certifications	ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark
Bluetooth Profiles Supported	BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 –Link Layer Privacy LE Privacy 1.2 –Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)

1. Wireless access point and internet service required and sold separately. Availability of public wireless access points limited.



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

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).

Intel® XMM™ 7360 LTE-Advanced CAT9¹

Technology/Operating bands	FDD LTE: 2100 (Band 1), 1900 (Band 2), 1800 (Band 3), 1700/2100 (Band 4), 850 (Band 5), 2600 (Band 7), 900 (Band 8), 1400 (Band 11), 700 (Band 12 lower), 700 (Band 13 upper), 700 (Band 17 lower), 850 (Band 18 lower), 850 (Band 19 upper), 800 (Band 20), 1400 (Band 21), 850 (Band 26), 700 (Band 28), 700 (Band 29 RX only), 2300 (Band 30), 1700/2100 (Band 66). TDD LTE: 2600 (Band 38), 1900 (Band 39), 2400 (Band 40), 2500 (Band 41). HSPA+: 2100 (Band 1), 1900 (Band 2), 1700/2100 (Band 4), 850 (Band 5), 900 (Band 8) MHz
Wireless protocol standards	3GPP Release 11 LTE Specification CAT.9, DL 60MHz BW throughput up to 450Mbps; UL 20MHz throughput up to 50Mbps WCDMA R99, 3GPP Release 5, 6, 7 and 8 UMTS Specification
GPS	Standalone, A-GPS (MS-A, MS-B)
GPS bands	1575.42 MHz ± 1.023 MHz, GLONASS 1596-1607MHz, Beidou 1561.098 MHz
Maximum data rates	LTE: 450 Mbps (Download), 50 Mbps (Upload) DC-HSPA+: 42 Mbps (Download), 5.76 Mbps (Upload) HSPA+: 21Mbps (Download), 5.76 Mbps (Upload)
Maximum output power	LTE: 1,200 mA (peak); 900 mA (average) HSPA+: 1,100 mA (peak); 800 mA (average)
Maximum power consumption	LTE: 1,200 mA (peak); 900 mA (average) HSPA+: 1,100 mA (peak); 800 mA (average)
Form Factor	M.2, 3042-S3 Key B
Weight	5.8 g
Dimensions (Length x Width x Thickness)	42 x 30 x 2.3 mm

1. Mobile Broadband is an optional feature. Connection requires wireless data service contract, network support, and is not available in all areas. Contact service provider to determine the coverage area and availability. Connection speeds will vary due to location, environment, network conditions, and other factors. 4G LTE not available on all products or in all countries.

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

POWER

65 W PD Adapter+G6	Dimensions (H x W x D)	3.54 x 2.0 x 1.12 in (9.0 x 5.1 X 2.85 cm)	
	Weight	0.51 lbs (235 g)	
	Input	100 to 240 VAC	
		Input Efficiency	81.5% min at 115 Vac/ 230Vac @ 5V/3A 86.7% min at 115 Vac/ 230Vac @ 9V/3A 88% min at 115 Vac/ 230Vac @ 12V/5A 89% min at 115 Vac/ 230Vac @ 20V/3.25A 89% min at 115 Vac/ 230Vac @ 15V/4.33A
		Input frequency range	47 ~ 63 Hz
		Input AC current	1.6 A at 90 VAC and maximum load
	Output	Output power	65 W
		DC output	5V/9V/12V/15V/20V
		Hold-up time	5ms at 115 Vac input by each output voltage
		Output current limit	8.0 A Maximum
		Over voltage protection	5V: 7.25V@OVP 9V: 13.05V@OVP 12V: 15.8V@OVP 15V: 21.75V@OVP 20V: 29V@OVP
	Connector	USB Type-C®	
	Environmental Design	Operating temperature	32°F to 95°F (0°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)

45 W PD Adapter	Dimensions (H x W x D)	3.74 x 1.69 x 1.08 in (9.5 x 4.3 x 2.75 cm)	
	Weight	0.45 lbs (200 g)	
	Input	100 to 240 VAC	
		Input Efficiency	81.5% min at 115 Vac/ 230Vac @ 5V/3A 86.7% min at 115 Vac/ 230Vac @ 9V/3A 87.4% min at 115 Vac/ 230Vac @ 12V/3A 87.8% min at 115 Vac/ 230Vac @ 15V/3A
		Input frequency range	47 ~ 63 Hz
		Input AC current	1.4 A at 90 VAC and maximum load
	Output	Output power	45 W
		DC output	5V/9V/12V/15V
		Hold-up time	5ms at 115 Vac input by each output voltage
		Output current limit	5.0 A Maximum
		Over voltage protection	5V: 7.25V@OVP 9V: 13.05V@OVP 12V: 16.0V@OVP 15V: 21.75V@OVP
	Connector		USB Type-C®
	Environmental Design	Operating temperature	32°F to 95°F (0°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 Prelude Pro Recycle Backpack	1X644AA
	HP Prelude Pro Recycle Top Load	1X645AA
	HP 13.3 Business Sleeve	2UW00AA
	HP Prelude Backpack 15.6	2MW63AA
Docking	HP Thunderbolt Dock 120W G2	2UK37AA
	HP USB-C®/A Universal Dock G2	5TW13AA
	HP USB-C® Dock G5	5TW10AA
	HP USB-C® Mini Dock	1PM64AA
	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® to VGA Adapter	N9K76AA
HP Rechargeable USI Active Pen	235N6AA	
Power	HP 45W USB-C® G2 Power Adapter	1MZ01AA
	65W 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

Summary of Changes

Date of change:	Version History:		Description of change:
	V1 to V2		Options and Accessories section updated

Copyright © 2020 HP Development Company, L.P. The only warranties for HP products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel®, Core® and Intel vPro™ are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. USB Type-C® and USB-C® are trademarks of USB Implementers Forum. SD, SDHC and SDXC are registered trademarks of SD-3C in the United States, other countries or both. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. © 2020 Google LLC All rights reserved. Google and the Google Logo are registered trademarks of Google LLC.