

Overview

HP Chromebook x360 14 G1



Left

- | | | | |
|----|--------------|----|---|
| 1. | Webcam LED | 5. | MicroSD Card Reader |
| 2. | Webcam | 6. | Headphone / Microphone Combo Jack |
| 3. | Touch Pad | 7. | AC Plug LED |
| 4. | Power Button | 8. | USB-C™ 3.1 Gen 1 (Support charging, power delivery, video and data) |

Overview



Right

- | | |
|--|----------------------------|
| 1. USB-C™ 3.1 Gen 1 (Support charging, power delivery, video and data) | 4. Nano Security Lock Slot |
| 2. AC Plug LED | 5. Volume Button |
| 3. USB-A 3.1 Gen 1 | |

At A Glance

- Sleek design with metal top cover and metal keyboard deck
- Intel®7th and 8th Generation processors
 - Pentium®, Core™ i3, i5 or i7
- Audio by B&O
- Android™ Apps ready
- Two USB Type-C™ charging
- USB Type-C™ docking support
- Memory up to 16 GB
- Storage up to 64 GB
- Long battery life up to 13 hrs*
- 16 mm thin
- Weight starting at 1.6 kg (3.7 lbs)
- 14" diagonal Full HD IPS narrow bezel, touch panel
- Backlit keyboard

*Testing conducted by HP using Google Chrome OS power LoadTest. Battery life will vary and the maximum capacity of the

Overview

battery will naturally decrease with time and usage. See <http://www.chromium.org/chromium-os/testing/power-testing> for test details.

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

Technical Specifications

PRODUCT NAME

HP Chromebook x360 14 G1

OPERATING SYSTEM

Preinstalled Chrome OS™

PROCESSOR

Intel® Celeron® processors

- Intel® Core™ i7-8650U with Intel® UHD Graphics 620 (1.9 GHz base frequency, up to 4.2 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores)^{1,2,3}
- Intel® Core™ i5-8350U with Intel® UHD Graphics 620 (1.7 GHz base frequency, up to 3.6 GHz with Intel® Turbo Boost Technology, 6 MB cache, 4 cores)^{1,2,3}
- Intel® Core™ i3-8130U with Intel® UHD Graphics 620 (2.2 GHz base frequency, up to 3.4 GHz with Intel® Turbo Boost Technology, 4 MB cache, 2 cores)^{1,2,3}
- Intel® Pentium® 4415U with Intel® HD Graphics 610 (2.3 GHz, 2 MB cache, 2 cores)^{1,2}

Processor Family

- 8th Generation Intel® Core™ i7 processor (i7-8650U)
- 8th Generation Intel® Core™ i5 processor (i5-8350U)
- 8th Generation Intel® Core™ i3 processor (i3-8130U)
- Intel® Pentium® processor

1. Multicore is designed to improve performance of certain software products. Not all customers or software applications will neces
from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and
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

Technical Specifications

GRAPHICS

Integrated

Intel® HD Graphics 610 ⁴
Intel® UHD Graphics 620 ⁴

NOTE: See processor section for details.

Supports

Support HD decode, DX12, HDMI 1.4b

4. HD content required to view HD images.

DISPLAY

Touch

35.56 cm (14") diagonal FHD IPS eDP BrightView Glass WLED-backlit slim-flat (3.0mm) touch screen, 220 cd/m², 67% sRGB (1920 x 1080) resolution, 16:9 aspect ratio, 45° viewing angle, 10-point multi-touch, Bezel ^{4,5}

4. HD content required to view HD images.
5. Resolutions are dependent upon monitor capability, and resolution and color depth settings.

STORAGE AND DRIVES

Primary Storage

32 GB eMMC 5.0 ⁶
64 GB eMMC 5.0 ⁶

6. For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 5.1 GB is reserved for system software.

MEMORY

Memory Soldered Down

8 GB DDR4-2133 SDRAM (1 x 8 GB) on-board
16 GB DDR4-2133 SDRAM (1 x 16 GB) on-board

Memory Slots

Memory soldered on board

Technical Specifications

NETWORKING/COMMUNICATIONS

WLAN

Intel® Dual Band Wireless-AC 7265 802.11ac (2x2) WLAN and Bluetooth® 4.2 Combo, non-vPro™ 7

Chromecast

Chromecast Support⁸

7. Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited.
8. Chromecast must be purchased separately.

AUDIO/MULTIMEDIA

Audio

B&O PLAY
2 Integrated stereo speakers

Camera

720p HD camera ⁴

4. HD content required to view HD images.

KEYBOARDS/TOUCHPAD

Keyboard

Full Size Textured island-style Keyboard Flint Silver, Backlit

Pointing Device

Multi-touch gesture support, taps enabled as default

SOFTWARE AND SECURITY

Preinstalled Software

Store up to 100 GB with Google Drive (2-year subscription included) ⁹
HP Classroom Manager ¹⁰

Security Management

H1 Security IC
Nano Security Lock Slot ¹¹

9. 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>
10. HP Classroom Manager is sold separately. Control and device locking from the teacher's desktop requires purchase of HP Classroom Manager.
11. Lock must be purchased separately.

Technical Specifications

POWER

Power Supply

HP Smart 45 W USB Type-C™ straight type AC adapter

Primary Battery

HP Long Life 3-cell, 60.9 Wh Li-ion ¹²

Power Cord

1 M length USB-C/power cord

Battery Life

Up to 13 hours¹³

Battery Weight

0.54 lb ¹²

0.24 kg ¹²

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

13. 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 <http://www.bapco.com> for additional details.

ENVIRONMENTAL

Eco-Label
Certifications &
declarations

This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks:

- IT ECO declaration
- US ENERGY STAR®
- EPEAT® Gold registered in the United States. See <http://www.epeat.net> for registration status in your country.
- TCO Certified 5.0.

System
Configuration
Energy
Consumption
(in accordance
with US ENERGY
STAR® test
method)

The configuration used for the Energy Consumption and Declared Noise Emissions data for the Notebook model is based on a "Typically Configured Notebook"?.

	115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz
Normal Operation (Sort idle)	4.76 W	4.40 W	4.62 W
Normal Operation (Long idle)	1.56 W	1.40 W	1.40 W
Sleep	0.60 W	0.65 W	0.60 W
Off	0.41 W	0.46 W	0.41 W

Note: Energy efficiency data listed is for an ENERGY STAR® compliant product if offered within the model family. HP computers marked with the ENERGY STAR® Logo are compliant with the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR® specifications for computers. If a model family does not offer ENERGY STAR® compliant configurations, then energy efficiency data listed is for a typically configured PC featuring a hard disk drive, a high efficiency power supply, and a Microsoft Windows® operating system.

Technical Specifications

Heat Dissipation* Normal Operation (Short idle) Normal Operation (Long idle) Sleep Off	115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz	
	16 BTU/hr	15 BTU/hr	16 BTU/hr	
	5 BTU/hr	5 BTU/hr	5 BTU/hr	
	2 BTU/hr	2 BTU/hr	2 BTU/hr	
	1 BTU/hr	2 BTU/hr	1 BTU/hr	
*Note: Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.				
Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296) Typically Configured - Idle Fixed Disk - Random writes Batteries	Sound Power (L _{WAd} , bels)		Sound Pressure (L _{pAm} , decibels)	
	3		23	
	3		23	
	This battery(s) in this product comply with EU Directive 2006/66/EC			
Additional Information	Batteries used in the product do not contain:			
	Mercury greater the1ppm by weight			
	Cadmium greater than 20ppm by weight			
	Battery size: CR2032 (coin cell)			
	Battery type: LithiumM			
	<ul style="list-style-type: none">• This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC.• This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive - 2002/96/EC.• This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).• This product is in compliance with the IEEE 1680 (EPEAT) standard at the <gold> level, see www.epeat.net• Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043.• This product contains 1% post-consumer recycled plastic (by wt.)• This product is 96.7% recycle-able when properly disposed of at end of life.			
	Packaging Materials	External:	PAPER/Corrugated	281 g
		Internal:	PLASTIC/Polyethylene Expanded - EPE	66 g
			PLASTIC/Polyethylene low density - LDPE	9 g
			PLASTIC/Polypropylene - PP	4 g
Material Usage	This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf : <ul style="list-style-type: none">• Asbestos			

Technical Specifications

- Certain Azo Colorants
- Certain Brominated Flame Retardants - may not be used as flame retardants in plastics
- Cadmium
- Chlorinated Hydrocarbons
- Chlorinated Paraffins
- Formaldehyde
- Halogenated Diphenyl Methanes
- Lead carbonates and sulfates
- Lead and Lead compounds
- Mercuric Oxide Batteries
- Nickel - finishes must not be used on the external surface designed to be frequently handled or carried by the user.
- Ozone Depleting Substances
- Polybrominated Biphenyls (PBBs)
- Polybrominated Biphenyl Ethers (PBBEs)
- Polybrominated Biphenyl Oxides (PBBOs)
- Polychlorinated Biphenyl (PCB)
- Polychlorinated Terphenyls (PCT)
- Polyvinyl Chloride (PVC) - except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.
- Radioactive Substances
- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)

Packaging Usage HP follows these guidelines to decrease the environmental impact of product packaging:

- Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.
- Eliminate the use of ozone-depleting substances (ODS) in packaging materials.
- Design packaging materials for ease of disassembly.
- Maximize the use of post-consumer recycled content materials in packaging materials.
- Use readily recyclable packaging materials such as paper and corrugated materials.
- Reduce size and weight of packages to improve transportation fuel efficiency.
- Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: <http://www.hp.com/go/reuse-recycle> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/recyclers>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

Hewlett-Packard Corporate Environmental Information

For more information about HP's commitment to the environment:

Global Citizenship Report

<http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html>

Eco-label certifications

<http://www8.hp.com/us/en/hp-information/environment/ecolabels.html>

ISO 14001 certificates:

Technical Specifications

http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/PC_GBU_Product_Design_ISO_14K_Certificate.pdf
and <http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf>

WEIGHTS & DIMENSIONS

Product Weight
Starting at 3.7 lbs ¹⁴
Starting at 1.61 kg ¹⁴

Product Dimensions (W x D x H)
12.81 x 8.93 x 0.63 in
32.55 x 22.7 x 1.6 cm

14. Weight will vary by configuration.

PORTS/SLOTS

Ports
2 USB 3.1 Type-C™ (Charge and video support, data transfer, power delivery)
1 USB 3.1 Gen 1 (Charging)
1 Stereo headphone / microphone combo jack

Expansion Slots
1 MicroSD
Supports SD, SDHC, SDXC

SERVICE AND SUPPORT

HP Services offers 1-year limited warranties and 90 day software limited warranty options depending on country. Batteries have a one year limited warranty except for Long Life batteries which will have same 1-year or 3-year limited warranty as the platform. For additional battery information, visit <http://www.hp.com/support/batterywarranty/>. 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 service for your HP product, use the HP Care Pack Services Lookup Tool at: <http://www.hp.com/go/cpc>. ¹⁵

15. HP Care Packs are sold separately. Service levels and response times for HP Care Packs may vary depending on your 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 limited by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.

SYSTEM UNIT

Technical Specifications

Stand-Alone Power Requirements (AC Power)	Nominal Operating Voltage	15V
	Average Operating Power	< 6.9W
	Integrated Graphics	HD Graphics 610 (Kabylake U) UHD Graphics 620 (Kabylake-R)
Temperature	Max Operating Power	< 45W
	Operating	41° to 95° F (5° to 35° C)
	Non-operating	-4° to 140° F (-20° to 60° C)
Relative Humidity	Operating	10% to 90%
	Non-operating	5% to 95%
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 ¹⁶
	EPEAT® 2019	Yes, Gold in U.S. ¹⁷
	ICES	Yes
	Australia	Yes
	NZ A-Tick Compliance	Yes
	CCC	Yes
	Japan VCCI Compliance	Yes
	KC	Yes
	BSMI	Yes
	CE Marking Compliance	Yes
	BNCI or BELUS	Yes
	CIT	Yes
	GOST	Yes
	Saudi Arabian Compliance (ICCP)	Yes
	SABS	Yes

16. Configurations of the HP Chromebook x360 14 G1 that are ENERGY STAR® certified are identified as HP Chromebook x360 14 G1 ENERGY STAR® on the ENERGY STAR® website and on <http://www.energystar.gov>.

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

DISPLAYS

Note: All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either with or without the use of the optional HP DisplayPort to HDMI adapter.

Technical Specifications

Panel LCD 14 inch diagonal FHD (1920x1080) BrightView WLED UWVA 45% cg 220 nits eDP slim NB	Outline Dimensions	315.81 x 197.57 mm (max)
	(W x H x D)	
	Active Area	309.31 x 173.99 mm
	Weight	280g (max)
	Diagonal Size	14.0 inch
	Thickness	3.0mm
	Interface	eDP1.3
	Surface Treatment	Glare
	Touch Enabled	YES
	Contrast Ratio	700:1 (typ)
	Refresh Rate	60Hz
	Brightness	220nits (typ)
	Pixel Resolution	1920 x 1080 FHD
	Format of LCD Pixel Arrangement	RGB
	Backlight	LED
	Color Gamut Coverage	72% of NTSC
	Color Depth	6bit
	Viewing Angle	UWVA 85/85/85/85

STORAGE AND DRIVES

eMMC 5.0	Height	1.4mm
	Width	11.5x13mm
	Interface	MMC protocol
	Transfer Rate	HS400
	Logical Blocks	32GB (31,268,536,320 Bytes)/64GB (62,537,072,640 Bytes)
	Operating Temperature	0 to 70 degree

NETWORKING/COMMUNICATIONS

Intel® 2 7265 802.11a/b/g/n/ac (2x2) WLAN and Bluetooth® 4.2 Combo¹ vPro⁴	Wireless LAN Standards	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 <ul style="list-style-type: none">2.402 - 2.482 GHz
		802.11a/n <ul style="list-style-type: none">4.9 - 4.95 GHz (Japan)5.15 - 5.25 GHz5.25 - 5.35 GHz5.47 - 5.725 GHz5.825 - 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 Mbps

Technical Specifications

	<ul style="list-style-type: none">• 802.11n: MCS 0 ~ MCS 15, (20MHz, and 40MHz)• 802.11ac: MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, 80MHz)
Modulation	Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM
Security ³	<ul style="list-style-type: none">• IEEE and WiFi compliant 64 / 128 bit WEP encryption for mode only• AES-CCMP: 128 bit in hardware• 802.1x authentication• WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and WPA2 certification• IEEE 802.11i• Cisco Certified Extensions, all versions through CCX4 and WPA2 Enterprise Lite• WAPI
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 minimum• 802.11g: +17.5dBm minimum• 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
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 10mW• Radio disabled 8 mW
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode
Receiver Sensitivity ³	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
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 MIMO communications and Bluetooth communications
Form Factor	PCI-Express M.2 MiniCard
Dimensions	Type 2230: 2.3 x 22.0 x 30.0 mm
Weight	Type 2230: 2.8g
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)

Technical Specifications

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.
- 3. Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a rate of 10% for 802.11a/g (OFDM modulation).
- 4. For full Intel® vPro™ functionality, Windows, a vPro supported processor, vPro enabled chipset, WLAN card and discrete TPM 2.0 are required. See <http://Intel.com/vpro>

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 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 ¹ 0.2 Mbps 1. Actual throughput may vary.
	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-EV5) 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 Consumption	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW
Electrical Interface	USB 2.0 compliant
Bluetooth Software Supported Link Topology	Linux kernel version
Power Management	Intel CNVi/BRI HW power management
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

Technical Specifications

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)

POWER

45 W PD AC adapter	Dimensions (H x W x D)	94 x 43 x 27.8mm
	Weight	200g
	Input	100 to 240 VAC
	Input Efficiency	5V/81.5%; 9V/86.7%; 12V/87.4%; 15V/87.8% (measured at 115Vac/60Hz and 230Vac/50Hz)
	Input frequency range	47 ~ 63 Hz
	Input AC current	1.4 Amperes RMS at 90 VAC
	Output	Output power 45W
	DC output	5V; 9V; 12V; 15V
	Hold-up time	5ms at 115 Vac input
	Output current limit	The power supply shall limit the maximum steady state output current to an average current of 5 Amperes. (OCP Interval: 30mS Minimum)
	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 1 to 16,400 ft (0 to 5000m)
		Humidity 20% to 95%
		Storage Humidity 10% to 95%
HP 3-cell Long Life Li-Ion (60 WHr)	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.
	Dimensions	4.34 x 267.7 x 116.11 mm (0.17 x 10.54 x 4.57 inch)
	Weight	0.245 kg (0.54 lb)
	Cells/Type	3cell Lithium-Ion Polymer cell / 368598
	Voltage	11.55V
	Amp-hour capacity	5.275Ah
	Watt-hour capacity	60.9Wh
	Operating (Charging)	32° to 113° F (0° to 45° C)
	Operating (Discharging)	14° to 122° F (-10° to 60° C)
	Optional Travel Battery Available	No

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

Category	Description	Part Number
Cases	HP Essential Top Load Case (up to 15.6")	H2W17AA#xxx
	HP Essential Backpack (up to 15.6")	H1D24AA
	HP Business Slim Top Load	2SC65AA
	HP 14.0 Always On Black Case	3YF54AA
Docking	HP USB-C Mini Dock	1PM64AA
	HP Elite USB-C Dock G5	5TW10AA
	HP USB-C Universal Dock G2	5TW13AA
Input Devices	HP USB-C to RJ45 Adapter	V7W66AA#xxx
	HP USB-C to HDMI 2.0 Adapter	1WC36AA
	HP USB-C to USB HUB	Z6A00AA
	HP USB to RJ45 Adapter	N7P47AA
	HP Stereo USB Headset	T1A67AA
	HP Stereo 3.5mm Headset	T1A66AA
	HP 3-Button Laser Mouse	H4B81AA#xxx
	HP USB Optical Travel mouse	G1K28AA
	HP 3-Button Laser Mouse	H4B81AA
	HP Ultra Mobile Wireless Mouse	H6F25AA
	HP Slim Bluetooth Mouse	F3J92AA#xxx
Power	65W USB-C Slim Power adapter	3PN48AA
	HP Notebook USB-C Power Bank	2NA10AA
	HP 45W USB-C G2 Power Adapter	1MZ01AA#ABA
Storage	HP External USB Optical Drive	F2B56AA
Security	HP Nano Keyed Cable Lock	1AJ39AA
Displays	HP ProDisplay P240va 23.8 inch Monitor	N3H14AA
	HP ProDisplay P232 23 inch Monitor	K7X31AA
	HP EliteDisplay E223 21.5 inch Monitor	1FH45AA
	HP EliteDisplay E243 23.8-inch Monitor	1FH47AA

Summary of Changes

Date of change:	Version History:		Description of change:
January 22, 2019	From v1 to v2	Updated	Docking
February 21, 2019	From v2 to v3	Added	Environmental tab
March 27, 2019	From v3 to v4	Added	Battery Life
April 23, 2019	From v4 to v5	Added	Networking Section Chromecast
August 26, 2019	From v5 to v6	Updated	Security Lock Slot, EPEAT and vPro disclaimers

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