

Overview

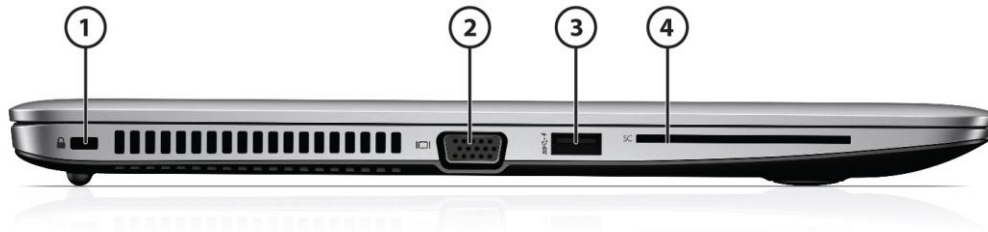
HP mt43 Mobile Thin Client



Front right

- | | | | |
|-----|-----------------------------------|-----|--|
| 1. | WLAN antennas (2) | 12. | USB 3.1 GEN 1 port |
| 2. | WWAN antennas (2) (select models) | 13. | Microphone/ headphones combo jack |
| 3. | Internal microphones (2) | 14. | DisplayPort™ |
| 4. | Webcam LED (select models) | 15. | USB-C™ port |
| 5. | Webcam (select models) | 16. | Touchpad |
| 6. | Wireless on/off button | 17. | Touchpad buttons (4) |
| 7. | Speaker mute button | 18. | Indicator LEDs: Wireless Light, Power Light, AC Adapter/Battery Light, Storage Usage Light |
| 8. | Power connector | 19. | Pointstick |
| 9. | SIM card slot | 20. | Power button |
| 10. | Docking connector | | |
| 11. | Ethernet port | | |

Overview



Left

1. Security lock slot
2. VGA port
3. USB 3.1 GEN 1 Charging port
4. Smart Card Reader

Overview

AT A GLANCE

- Stylish, lightweight magnesium and aluminum chassis
- No dongles are needed with built-in VGA, drop-jaw RJ-45 Ethernet port, 2 USB 3.1 GEN 1, 1 USB Type-C™, and 1 DisplayPort™ for high resolution support
- Customer serviceable and upgradeable with component accessible design
- Accelerated Processing Unit (APU) and graphics from AMD
- Optimize your audio experience for remote collaboration with optional HD webcam, dual-microphone array, premium speakers, and audio by Bang & Olufsen
- Improved keyboard experience featuring HP Premium Keyboard
- Optional back-lit keyboard keeps you productive in all settings with HP DuraKeys to protect keys from fading
- Pending MIL STD testing¹
- Enhanced security features including TPM 2.0, SmartCard Reader, Self-Encrypting storage drives, and optional Fingerprint reader
- LED-backlit display: 35.6 cm (14") diagonal Non-Touch
- Experience new vibrant color provided by AMD Vivid Color Technology
- Flexible wireless connectivity options including mobile broadband
- Easily dock with the HP UltraSlim Docking Station
- 128 GB M.2 2280 flash memory storage drive
- SDRAM system memory up to 16 GB
- Preinstalled with Windows 10 IoT Enterprise operating system

¹ MIL STD 810G testing is pending and is not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Damage under the MIL STD test conditions or any accidental damage requires an optional HP Accidental Damage Protection Care Pack.

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

Features

OPERATING SYSTEM

Preinstalled: Windows 10 IoT Enterprise

NOTE: Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com>.

ACCELERATED PROCESSING UNIT

AMD PRO A8-9600B (1.6 GHz, up to 3.0 GHz, 2MB Cache, 4 Cores) with AMD Radeon™ R5 Graphics¹

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. AMD's numbering is not a measurement of clock speed.

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

GRAPHICS

Integrated Graphics: AMD PRO A8 -9600B with AMD Radeon™ R5 Graphics

AMD UMA Graphics - with shared video memory
Support dual-display ports through optional docking station¹

¹ Sold separately or as an optional feature.

DISPLAY

35.6 cm (14") diagonal LED backlight FHD Slim eDP SVA Anti-glare (1920 x 1080)¹

35.6 cm (14") diagonal LED backlight FHD Slim eDP SVA Anti-glare (1920 x 1080) with camera¹

External

Up to 32-bit per pixel color depth

VGA

Port supports resolutions up to 1900 x 1200 external resolution @60 Hz

DisplayPort™

Supports resolutions up to 4096 x 2160 @ 60Hz

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

Number of Displays supported with Docking

Supports 3 independent displays if used with optional HP Ultralim Docking Station.²

¹ HD content required to view HD images.

² Sold separately or as an optional feature.

Features

STORAGE AND DRIVES

Primary Storage

128GB M.2 2280 SATA-3 flash memory storage drive

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less.

MEMORY

Standard

DDR4 PC4 - 1866 (Transfer rates up to 1866 MT/s)

Two SODIMM slots supporting dual-channel memory

Both slots are customer accessible / upgradeable

Supports the following configurations:

4096 MB Total System Memory (4096 MB x 1)

8192 MB Total System Memory (4096 MB x 2)

8192 MB Total System Memory (8192 MB x 1)

16384 MB Total System Memory (8192 MB x 2)

Maximum

Up to 16 GB

Dual-channel

Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory slots.

NOTE: Improved system performance when memory is added in pairs (dual channel).

Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed.

NETWORKING/COMMUNICATIONS

Broadband Wireless (WWAN)

HP It4120 Qualcomm® Snapdragon™ X5 LTE Mobile Broadband Module^{1,2}

HP hs3210 HSPA+ Mobile Broadband^{1,2}

Wireless LAN (WLAN) Via MiniCard

Intel® Dual Band Wireless-AC 7265: 802.11 a/b/g/n/ac (2x2) Wi-Fi + Bluetooth® 4.2 Combo³

¹ Sold separately or as an optional feature

² WWAN module is optional, must be configured at the factory and requires separately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location, environment, network conditions, and other factors. 4G LTE not available on all products, in all regions.

³ Wireless access point and Internet service is required and is not included. Availability of public wireless access points limited. The specifications for the 802.11 ac WLAN are draft specifications 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 ac WLAN devices.

Gigabit Ethernet

Broadcom 5762 Gigabit Ethernet NIC with DASH support

Features

NOTE: The term "10/100/1000" or "Gigabit" Ethernet indicates compatibility with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required

AUDIO/MULTIMEDIA

Audio by Bang & Olufsen

Digital Microphones (Dual Array)
2 Premium Stereo Speakers

Webcam¹

Optional² 720p webcam

¹ Internet access required.

² Included on select models.

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

HP Premium Keyboard

Minor spill-resistant with drain using a thin layer of Mylar film under the keyboard
DuraKeys & Backlit
Dual Point

Pointing Devices

Glass Touchpad
On/Off button
Taps enabled as default
Gestures enabled by default - 2 Finger Scrolling, 2 Finger Zoom (Pinch)

Function Keys

F1 - Sleep
F2 - Blank
F3 - Backlit Toggle
F4 - Display Switching
F5 - Brightness Down
F6 - Brightness Up
F7 - Blank
F8 - Volume Down
F9 - Volume Up
F10 - Mic Mute
F11 - Blank
F12 - numlock

Hidden Function Keys

Fn+R - Break
Fn+S - Sys Rq
Fn+C - Scroll Lock
Fn+Up - PG UP
Fn+Down - PG Down
Fn+Left - Home

Features

Fn+ Right - End

SOFTWARE AND SECURITY

BIOS

HP BIOSphere¹
HP Sure Start Gen3
HP DriveLock | HP Automatic DriveLock
BIOS Update via Network
Master Boot Record Security
Power On Authentication
Secure Erase²
Pre-boot Authentication

Communication / Connectivity

HP Mobile Connect Pro (Windows 10 only)⁴
Native Miracast Support⁵
HP LAN-WLAN Protection
HP MAC Address Manager
HP Wireless Wakeup

HP Value Add Software

HP ePrint Driver + JetAdvantage⁶
HP Hotkey Support
HP Noise Cancellation Software

Manageability

HP Driver Packs⁸
HP SoftPaq Download Manager (SDM)
HP System Software Manager (SSM)⁸
HP BIOS Config Utility (BCU)⁸
HP Client Catalog⁸
HP Management Integration Kit for Microsoft SCCM⁸
LANDESK Management⁹

For more information on HP Client Management Solutions refer to: <http://www.hp.com/go/clientmanagement>.

Client Security Software

- HP Drive Lock
- Power On Authentication

Microsoft Defender

Security

Trusted Platform Module (TPM) 2.0 (Infineon SLB9670). Common Criteria EAL4+ Certified.
Integrated Smart Card Reader
Security lock slot (Lock sold separately)

For more information on HP Client Security Software Suite, refer to <http://www.hp.com/go/clientsecurity>.

¹ Available only on business PCs with HP BIOS.

Features

² For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88.

³ Absolute agent is shipped turned off, and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: <http://www.absolute.com/company/legal/agreements/computrace-agreement>. Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software.

⁴ HP Mobile Connect Pro is only available on preconfigured devices with WWAN. For geographic availability refer to <http://www.hp.com/go/mobileconnect>

⁵ Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming media players that also support Miracast. You can use Miracast to share what you're doing on your PC and present a slide show. For more information: <http://windows.microsoft.com/en-us/windows-8/project-wireless-screen-miracast>.

⁶ Requires an Internet connection to HP web-enabled printer and HP ePrint account registration (for a list of eligible printers, supported documents and image types and other HP ePrint details, see <http://www.hp.com/go/eprintcenter>). Requires optional broadband module. Broadband use requires separately purchased service contract. Check with service provider for coverage and availability in your area. Separately purchased data plans or usage fees may apply. Print times and connection speeds may vary.

⁷ Skype is not offered in China.

⁸ Not preinstalled, however available for download at <http://www.hp.com/go/clientmanagement>

⁹ Subscription required.

Features

POWER

Power Supply¹

HP 45W Smart AC Adapter

HP 45W 2-prong DC jack AC Adapter

HP 65W Smart AC Adapter (Supports HP Fast Charging)

HP 65W Smart AC Adapter EM (Supports HP Fast Charging)

¹ Availability may vary by country.

Power cord is configurable; either 3.2 feet or 6 feet (1.0 or 1.8 meter)

Total length including external AC adapter is 9.2 feet or 12 feet (2.86 or 3.66 meter)

Primary Battery

HP 3-cell Long Life Li-Ion (51 WHr) (Supports HP Fast Charging)

Battery Life

Up to 15h 30m life

Power Conservation

Standby

ACPI Compliance

WEIGHTS & DIMENSIONS

Weight¹

Starting at 3.48 lbs (1.48 kg)

(3-cell battery (51WHr), UMA, no FPR, 1 SODIMM, WLAN, M.2 SSD, no camera, no WWAN, QHD screen)

Dimensions² (w x d x h)

13.3 x 8.9 x 0.74 in

33.8 x 22.7 x 1.89 cm

¹ Weight varies by configuration and components.

² Height varies depending upon where on the notebook the measurement is made.

Features

PORTS/SLOTS

Ports

- 1 USB 3.1 GEN 1 Charging Port
- 1 USB 3.1 GEN 1 Port
- 1 USB Basic Type-C™ (Up to 5 Gbps data transfer and 15W power)
- 1 Display Port™
- 1 RJ-45 / Ethernet
- 1 Docking connector
- 1 Headphone/Microphone Combo
- 1 AC Port

NOTE: Cables are not included.

Slots

- External Micro SIM Slot(3FF)
- 15 x 12 mm
- SD Media Reader Slot Supports SD, SDHC, SDXC

SERVICE AND SUPPORT

HP Services offers a 1-year limited warranty. On-site service varies by country. 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 Tool at: <http://www.hp.com/go/cpc>.

¹ Sold separately or as an optional feature.

² Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: <http://www.hp.com/go/cpc>.

Technical Specifications

SYSTEM UNIT

Stand-Alone Power Requirements (AC Power)	Nominal Operating Voltage	19.5 V
	Average Operating Power	Windows 10 (64-bit)
	Integrated graphics	12.9W
Temperature	Max Operating Power	UMA < 65W
	Operating	32° to 95° F (0° to 35° C) (not writing optical) 41° to 95° F (5° to 35° C) (writing optical)
	Non-operating	-4° to 140° F (-20° to 60° C)
Relative Humidity		10% to 90%, non-condensing
		5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature
Shock	Operating	40 G, 2 ms, half-sine
	Non-operating	200 G, 2 ms, half-sine
Random Vibration	Operating	0.75 grms
	Non-operating	1.50 grms
Altitude (unpressurized)	Operating	-50 to 10,000 ft (-15.24 to 3,048 m)
	Non-operating	-50 to 15,000 ft (-15.24 to 12,192 m)
Planned Industry Standard Certifications	UL	Yes
	CSA	Yes
	FCC Compliance	Yes
	ENERGY STAR®	Select models*
	EPEAT®	Registered Gold in United States**
	ICES	Yes
	Australia / NZ RCM Compliance	Yes
	CCC	Yes
	Japan VCCI Compliance	Yes
	KC	Yes
	BSMI	Yes
	CE Marking Compliance	Yes
	CIT	Yes
	EAC	Yes
	Saudi Arabian Compliance (SASO)	Yes
SABS	Yes	
UKRSERTCOMPUTER	Yes	

* Configurations of the HP mt43 Mobile Thin Client that are ENERGY STAR qualified are identified as HP mt43 Mobile Thin Client ENERGY STAR on HP websites and on <http://www.energystar.gov>.

** EPEAT registration varies by country. See <http://www.epeat.net> for registration status by country. EPEAT status listed above applies to U.S. For accessibility information on HP products, please visit: <http://www.hp.com/accessibility>.

Technical Specifications

DISPLAYS

35.56 cm (14") diagonal LED backlight FHD Slim eDP SVA Anti-glare non-touch (1920 x 1080)	Outline Dimensions (W x H x D)	320.9 x 205.6 (max) x 3.0(max) mm		
	Active Area	309.40 x 173.95 (mm)		
	Weight	270 g max		
	Diagonal Size	14"		
	Surface Treatment	Anti-Glare (AG)		
	Contrast Ratio	300:1 (typ)		
	Refresh Rate	60Hz		
	Response time	16ms typ.		
	Pixel Per Inch (PPI)	157		
	Brightness	300nits		
	Pixel Resolution	Format	1920 x 1080 (FHD)	
		Configuration	RGB	
	Interface	eDP 1.2		
	LCD Mode	TN		
Viewing Angle	SVA 45/45/25/35			

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

NETWORKING*

HP lt4120 Qualcomm® Snapdragon™ X5 LTE Mobile Broadband Module

Technology/Operating bands LTE: 2100 (Band 1), 1900 (Band 2), 1800 (Band 3), 1700/2100 (Band 4), 850 (Band 5), 2600 (Band 7), 900 (Band 8), 700 (Band 12 lower), 700 (Band 13 upper), 700 (Band 17 lower), 800 (Band 20), 700 (Band 28).
 HSPA+: 2100 (Band 1), 1900 (Band 2), 1700/2100 (Band 4), 850 (Band 5), 900 (Band 8) MHz
 EV-DO: 850 (BC0), 1900 (BC1) MHz (Only work with Verizon network)
 E-GPRS: 1900 (Band 2), 1800 (Band 3), 850 (Band 5), 900MHz (Band 8)

Wireless protocol standards 3GPP Release 10 LTE Specification CAT.4, 20MHz BW
 WCDMA R99, 3GPP Release 5, 6, 7 and 8 UMTS Specification
 1xEVDO Release 0, A and B.
 E-GPRS: Class B, Multi-slot class 12, coding schemes CS1 - CS4 and MSC1 - MSC9

GPS Standalone, A-GPS (MS-A, MS-B and XTRA)

GPS bands 1575.42 MHz ± 1.023 MHz, GLONASS 1596-1607MHz

Maximum data rates LTE: 150 Mbps (Download), 50 Mbps (Upload)
 DC-HSPA+: 42 Mbps (Download), 5.76 Mbps (Upload)
 HSPA+: 21Mbps (Download), 5.76 Mbps (Upload)

Technical Specifications

CDMA 1xRTT: 153.6 kbps (Download), 153.6 kbps (Upload)
EVDO Rel.A: 3.1 Mbps (Download), 1.8 Mbps (Upload)
EVDO Rel.B: 14.7 Mbps (Download), 5.4Mbps (Upload)
EDGE: 236.8 kbps (Download), 236.8 kbps (Upload)
GPRS: 85.6 kbps(Download), 85.6 kbps (Upload)

Maximum output power

LTE: 23 dBm
HSPA+: 23.5 dBm
1xRTT/EVDO: 24dBm
E-GPRS 1900/1800: 26 dBm
E-GPRS 900/850: 27 dBm
GPRS 1900/1800: 29.5 dBm
GPRS 900/850: 32.5 dBm

Maximum power consumption

LTE: 1,200 mA (peak); 900 mA (average)
HSPA+: 1,100 mA (peak); 800 mA (average)
1xRTT/EVDO: 1,000 mA (peak); 700 mA (average)
E-GPRS: 2,800 mA (peak); 500 mA (average)

Form Factor

M.2, 3042-S3 Key B

Weight

6.2 g

Dimensions

(Length x Width x Thickness)

42 x 30 x 2.3 mm

* 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.

HP hs3210 HSPA+ Mobile Broadband**Technology/Operating bands**

HSPA+: 2100 (Band1), 1900 (Band 2), 850 (Band 5), 900 (Band 8) MHz
E-GPRS: 1900 (Band 2), 1800 (Band 3), 850 MHz (Band 5), 900 (Band 8) MHz

Wireless protocol standards

WCDMA R99, 3GPP Release 5, 6 and 7 UMTS Specification
E-GPRS: Class B, Multi-slot class 33, coding schemes CS1 - CS4 and MSC1 - MSC9

Maximum data rates

HSPA+: 21.6 Mbps (Download), 5.76 Mbps (Upload)

E-GPRS: 296 kbps (Download), 236.8 kbps (Upload)
GPRS: 107 kbps (Download), 85.6 kbps (Upload)

Maximum output power

HSPA+: 24 dBm
E-GPRS 1800/1900: 26 dBm

E-GPRS 850/900: 27 dBm
GPRS 1800/1900: 30 dBm
GPRS 850/900: 33 dBm

Maximum power consumption

HSPA+: 1,100 mA (peak); 800 mA (average)
E-GPRS: 2,800 mA (peak); 700 mA (average)

Form Factor

M.2, 2242-S3 Key B

Weight

6 g

Technical Specifications

Dimensions 1.65 x 8.66 x 0.09 in (42 x 22 x 2.38 mm)
(Length x Width x Thickness)

* 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.

Note: Wireless access point and Internet service required. Availability of public wireless access points limited. The specifications for the 802.11ac WLAN are draft specifications 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 802.11ac WLAN devices.

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)

Data Rates and Throughput 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 + 4 dBm for BR and EDR.

	Modulation	0.01% BER	0.001% BER
Receiver Sensitivity Legacy	GFSK	-80 dBm	-70 dBm
	$\pi/4$ -DQPSK	-80 dBm	-70 dBm
	8DPSK	-80 dBm	-70 dBm

Power Consumption Peak (Tx) 330 mW
Peak (Rx) 230 mW
Selective Suspend 17 mW

Range Legacy Up to 33 ft (10 m)
BLE Up to 99 ft (30 m)

Electrical Interface USB 2.0 compliant

Bluetooth Software Supported Link Topology Microsoft Windows Bluetooth Software

Electrical Interface Point to Point, Multipoint Pico Nets up to 7 slaves

Bluetooth Software Supported Security Full support of Bluetooth Security Provisions

Power Management Microsoft Windows ACPI, and USB Bus Support

Certifications Self-configurable to optimize power conservation in all operating modes, including Standby, Hold, Park, and Sniff

Security All necessary regulatory approvals for supported countries, including:

Certifications FCC (47 CFR) Part 15C, Section 15.247 & 15.249

Bluetooth Profiles Supported

Technical Specifications

Power Management	ETS 300 328, ETS 300 826
Certifications	Low Voltage Directive IEC950 UL, CSA, and CE Mark Serial Port Profile (SPP) ¹ Service Discovery Application Profile (SDAP) Dial-Up Networking (DUN) ^{1,2} Generic Object Exchange Profile (GOEP) ^{1,2} Object Push Profile (OPP) ^{1,2} Hard Copy Cable Replacement (HCRP) ^{1,2} Personal Area Networking Profile (PAN) ^{1,2} Human Interface Device Profile (HID) ^{1,2} Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP) Audio Video Remote Control Profile (AVRCP)
Certifications	
Bluetooth Profiles Supported	
Bluetooth V4.1/V4.2 support feature	V4.1: ESR5/6/7 compliant V4.2: ESR8 compliant, LE Secure Connection – Basic.

STORAGE AND DRIVES

128 GB M.2 2280 SATA-3 Flash Memory Drive

Drive Weight	0.01 lb (6 g) ~ 0.02 lb (10 g)	
Capacity	128 GB	
Height	0.09 in (2.3 mm)	
Width	0.87 in (22 mm)	
Interface	ATA-8, SATA 3.0	
Performance	Maximum Sequential Read	Maximum Sequential Write
	Up To 535 MB/s	Up To 515 MB/s
Logical Blocks	250,069,680	
Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]	
Features	DIPM; TRIM; DEVSLP	

Technical Specifications

POWER

HP 45W Smart AC Adapter	Dimensions (H x W x D)	9.5 x 4.0 x 2.65 cm}	
	Weight	unit: 200g +/- 10g	
	Input	90 to 265 VAC	
		Input Efficiency	87.74% at 115Vac and 88.4% at 230Vac
		Input frequency range	47 to 63 Hz
		Input AC current	Max. 1.4 A at 90 Vac
	Output	Output power	45W
		DC output	19.5V
		Hold-up time	5 ms at 115 Vac input
		Output current limit	<8.0A
	AC Connector (Ac Inlet)	C6 (3pin/with grounded, with Smart ID DC connector)	
	Environmental Design	Operating temperature	32° to 95° F (0° to 35° C)
		Non-operating (storage) temperature	-4° to 185° F (-20° to 85° C)
		Altitude	0 to 16,400 ft (0 to 5,000 m)
		Humidity	20% to 95%
Storage Humidity		10% to 95%	
EMI and Safety Certifications	<p>*CE Mark - full compliance with LVD and EMC directives</p> <p>* 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.</p> <p>* MTBF - over 200,000 hours at 25°C ambient condition.</p>		

HP 45W Smart AC Adapter (2 Prong)	Dimensions (H x W x D)	95.0x40.0x26.5mm	
	Weight	unit: 200g +/- 10g	
	Input	90 to 265 VAC	
		Input Efficiency	87.74% at 115Vac and 88.4% at 230Vac
		Input frequency range	47 to 63 Hz
		Input AC current	Max. 1.4 A at 90 Vac
	Output	Output power	45W
		DC output	19.5V
		Hold-up time	5 ms at 115Vac input
		Output current limit	<8.0A
	AC Connector (Ac Inlet)	C8 (2 pin/non-grounded, with Smart ID DC connector)	
	Environmental Design	Operating temperature	32° to 95° F (0° to 35° C)
		Non-operating (storage) temperature	-4° to 185° F (-20° to 85° C)
		Altitude	0 to 16,400 ft (0 to 5,000 m)

Technical Specifications

EMI and Safety Certifications	Humidity	20% to 95%
	Storage Humidity	10% to 95%
	*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.	

HP 65W Smart AC Adapter	Dimensions	107.0x47.0x30.0mm	
	Weight	unit: 250g +/- 10g	
	Input	90 to 265 VAC	
		Input Efficiency	88.0 % at 115 Vac and 89.0 % at 230 Vac
		Input frequency range	47 to 63 Hz
		Input AC current	1.7 A at 90 Vac
	Output	Output power	65W
		DC output	19.5V
		Hold-up time	5 ms at 115 Vac input
		Output current limit	<11.0A
	AC Connector (Ac Inlet)	C6 (3pin/with grounded, with Smart ID DC connector)	
	Environmental Design	Operating temperature	32° to 95° F (0° to 35° C)
		Non-operating (storage) temperature	-4° to 185° F (-20° to 85° C)
		Altitude	0 to 16,400 ft (0 to 5,000 m)
		Humidity	20% to 95%
		Storage Humidity	10% to 95%
EMI and Safety Certifications	Eg:- *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.		

Technical Specifications

HP 65W Smart AC Adapter EM	Dimensions	102.0x55.0x30.0mm	
	Weight	unit: 350g +/- 10g	
	Input	90 to 265 VAC	
		Input Efficiency	87.0% min at 115 VAC and 230Vac
		Input frequency range	47 to 63 Hz
		Input AC current	1.7 A at 90 VAC
	Output	Output power	65W
		DC output	19.5V
		Hold-up time	5 ms at 115 Vac input
		Output current limit	<11.0A
	AC Connector (Ac Inlet)	C6 (3pin/with grounded, with Smart ID DC connector)	
	Environmental Design	Operating temperature	32° to 95° F (0° to 35° C)
		Non-operating (storage) temperature	-4° to 185° F (-20° to 85° C)
		Altitude	0 to 16,400 ft (0 to 5,000 m)
		Humidity	20% to 95%
	Storage Humidity	10% to 95%	
EMI and Safety Certifications	<p>*CE Mark - full compliance with LVD and EMC directives</p> <p>* 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.</p> <p>* MTBF - over 200,000 hours at 25°C ambient condition.</p>		

HP 3-cell Long Life Li-Ion (51 WHr)	Dimensions (H x W x L)	6.8mm x 102.8mm x 198mm	
	Weight	235g	
	Cells/Type	3cell Lithium-Ion Polymer cell / 506480	
	Energy	Voltage	11.55V
		Amp-hour capacity	4420mAh
		Watt-hour capacity	51wh
	Temperature	Operating (Charging)	0~45 C
		Operating (Discharging)	-10~60 C
	Fuel Gauge LED	NA	
	Warranty	1000 cycles > 65% (at 23°C)	
Optional Travel Battery Available	No		

Technical Specifications

ENVIRONMENTAL

TBD

COUNTRY OF ORIGIN

China

Options and Accessories (Sold separately and availability may vary by country.)

Type	Description	Part Number
Docking	HP UltraSlim Docking Station	D9Y32AA#xxx
Input/Output	HP UC Wired Headset	K7V17AA
Memory	HP 4GB 2133MHz DDR4 Memory	T7B76AA
	HP 8GB 2133MHz DDR4 Memory	T7B77AA
Power	HP 65W Slim AC Adapter	H6Y82AA#xxx
	HP 45W Smart AC Adapter	H6Y88AA#xxx
	HP 65W Smart AC Adapter	H6Y89AA#xxx
	HP Notebook Power Bank	N9F71AA#xxx
Security	HP Combination Lock	TOY15AA
Misc	HP 14" Notebook PC Privacy Filter	J6E65AA
	USB-C™ to USB 3.0 dongle	N2Z63AA

Summary of Changes

Date of change:	Version History:	Type of change	Description of change:
January 16, 2017	From v1 to v2	Added	Battery life
		Changed	Windows OS note, HP hs3210 naming, Spill resistant to Minor spill-resistant, service and support wording and warranty statement
		Remove	storage note for windows, System Standby Time

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