

Overview

HP EliteBook 735 G6 Notebook PC



- | | |
|---|---|
| 1. HD and IR Camera (Optional) | 7. Clickpad |
| 2. Ambient Light Sensor (Optional) | 8. Smartcard Reader (Optional) |
| 3. IR Camera LEDs (Optional) | 9. USB 3.2 Gen 1 Charging Port |
| 4. Internal Microphones | 10. Vents |
| 5. HP Privacy Camera Shutter | 11. Nano Security Lock Slot (Lock sold separately) |
| 6. HD Camera LED | 12. Power Button |

Left

Overview



Right

- | | |
|-----------------------------------|--|
| 1. Power Connector | 6. USB 3.2 Gen 1 port |
| 2. USB Type-C™ | 7. Audio Combo Jack |
| 3. Docking Connector | 8. SIM Card Slot ¹ |
| 4. Ethernet Port | 9. Touch Fingerprint Sensor (Optional) |
| 5. HDMI Port (Cable not included) | 10. Pointstick |

1. All units have a SIM card slot and icon but units that do not support WWAN are shipped with a non-removable SIM slot plug

Overview

AT A GLANCE

- **Eye-catching Ultraslim design, premium precision-crafted machined aluminum (CNC), seamless formed aluminum chassis for clean, crisp, premium look and feel**
- **Choice of 2nd Generation AMD® Ryzen™ PRO processors**
- **Designed to support all HP docking options including HP's traditional Ultraslim mechanical dock and all-new Thunderbolt™ dock.¹ The 735 notebooks connect to the Thunderbolt docks via USB-C alt-mode.**
- **Featuring HP Collaboration Keyboard with Clickpad to manage most commonly used conferencing functions with a single keystroke**
- **Innovative world-facing third mic improves inbound ambient noise cancellation while 360 degree mic pick-up allows everyone to clearly hear and be heard**
- **Optional ant-glare touch displays with ambient light sensor**
- **Choice of displays:**
 - 33.8 cm (13.3") diagonal FHD IPS anti-glare LED-backlit, non-touch, 250 nits, 45% NTSC
 - 33.8 cm (13.3") diagonal FHD IPS anti-glare LED-backlit non-touch 400 nits, 72% NTSC
 - 33.8cm (13.3") diagonal FHD IPS anti-glare LED-backlit non-touch, 1000 nits, 72% NTSC with HP Sure View⁶
 - 33.8cm (13.3") diagonal FHD Anti-Glare On-Cell LED-backlit touch, 250 nits, 45% NTSC
- **Enterprise grade security with HP SureStart, HP Privacy Camera¹, HP Sure View⁴, HP Sure Run, HP Sure Recover, HP Sure Click, HP Sure Sense⁵, SmartCard Reader¹ and Touch Fingerprint reader¹**
- **Preinstalled with Windows 10 versions or FreeDOS**
- **Supports fast charging (50% in 30 minutes) with no impact on battery recharge cycles²**
- **Enables AMD Memory Guard to help defend against cold boot attacks with real-time encryption and decryption of system's memory**
- **Flexible wireless connectivity options**
- **Passed MIL-STD 810G tests³**
- **Battery Life up to 15 hours and 15 minutes (2nd Gen AMD® Ryzen™ PRO APU processor, 13.3" 400 nits panel and 3-cell 50Whr battery)**

1. Sold separately or as an optional feature.

2. HP Elite notebooks up to 50% within 30 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.

3. MIL STD 810G testing 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. Accidental damage requires an optional HP Accidental Damage Protection Care Pack.

4. HP Sure View G3 integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation. Available in Q3'19.

5. HP Sure Sense requires Windows 10. See product specifications for availability.

6. Touch-enabled display and Sure View privacy panel will lower actual brightness

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

Features

PRODUCT NAME

HP EliteBook 735 G6 Notebook PC

OPERATING SYSTEM

Preinstalled

Windows 10 Pro 64¹
Windows 10 Pro 64 (National Academic License)²
Windows 10 Home 64¹
Windows 10 Home Single Language 64¹
Windows 10 Pro (Windows 10 Enterprise available with a Volume Licensing Agreement)¹
FreeDOS

1. 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. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com/>.

2. Some devices for academic use will automatically be updated to Windows 10 Pro Education with the Windows 10 Anniversary Update. Features vary; see <https://aka.ms/ProEducation> for Windows 10 Pro Education feature information.

NOTE: Your product does not support Windows 8 or Windows 7

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>.

PROCESSORS

AMD Ryzen™ 7 PRO 3700U APU with Radeon™ Vega 10 Graphics (2.3 GHz base clock, up to 4 GHz max boost clock, 4 MB L3 cache, 4 cores)^{3,4,5}

AMD Ryzen™ 5 PRO 3500U APU with Radeon™ Vega 8 Graphics (2.1 GHz base clock, up to 3.7 GHz max boost clock, 4 MB L3 cache, 4 cores)^{3,4,5}

AMD Ryzen™ 3 PRO 3300U APU with Radeon™ Vega 6 Graphics (2.1 GHz base clock, up to 3.5 GHz max boost clock, 4 MB L3 cache, 4 cores)^{3,4,5}

Processor Family

2nd Gen AMD[®] Ryzen™ PRO APU processor⁵

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

4. 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.

5. 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

Features

GRAPHICS

Integrated

AMD Radeon™ Vega Graphics⁶

Supports

Support HD decode, DX12, and HDMI2.0

6. HD content required to view HD images.

DISPLAY

Non-Touch

33.8 cm (13.3") diagonal FHD IPS eDP anti-glare WLED-backlit slim, 250 nits, 45% NTSC (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP anti-glare WLED-backlit slim, 250 nits, 45% NTSC with HD camera (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP anti-glare WLED-backlit slim, 250 nits, 45% NTSC with HD + IR camera (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP anti-glare WLED-backlit slim, 250 nits, 45% NTSC for WWAN (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP anti-glare WLED-backlit slim, 250 nits, 45% NTSC with HD camera for WWAN (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP anti-glare WLED-backlit slim, 250 nits, 45% NTSC with HD + IR camera for WWAN (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP + PSR anti-glare WLED-backlit ultraslim, 400 nits, 72% NTSC with Ambient Light Sensor and HD + IR camera (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP + PSR anti-glare WLED-backlit ultraslim, 400 nits, 72% NTSC with Ambient Light Sensor and HD + IR camera for WWAN (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP + PSR anti-glare WLED-backlit ultraslim with HP Sure View Integrated Privacy Screen, 1000 nits, 72% NTSC with Ambient Light Sensor and HD + IR camera for WWAN (1920 x 1080)^{6,7,8,9,46}

Touch

33.8 cm (13.3") diagonal FHD IPS eDP anti-glare On-Cell WLED-backlit slim touch screen, 250 nits, 45% NTSC with HD+IR camera (1920 x 1080)^{6,8,9}

33.8 cm (13.3") diagonal FHD IPS eDP anti-glare On-Cell WLED-backlit slim touch screen, 250 nits, 45% NTSC, with HD+IR camera for WWAN (1920 x 1080)^{6,8,9}

HDMI 2.0

Support resolution up to 4k @ 60Hz

6. HD content required to view HD images.

7. HP Sure View Gen3 integrated privacy panel is an option feature that must be configured at purchase and is designed to function in landscape orientation. Available in Q3'19.

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

9. Sold separately or as an optional feature.

46. Touch-enabled display and Sure View privacy panel will lower actual brightness

Features

<i>Docking station model</i>	<i>Total number of supported displays (incl. the notebook display)</i>	<i>Max.resolutions supported</i>	<i>Dock Connectors</i>	<i>Technical limitations</i>
HP UltraSlim Docking Station	4	Dual 2.5K @ 60Hz	2xDP, 1xVGA	Dual 2.5k only with both displays into DP
HP Thunderbolt Dock G2	4	Dual 2560 x 1600 @ 60Hz Single 3840 x 2160 @ 60Hz	2xDP, 1xVGA, 1xTB, 1xUSB-C alt-mode	
HP Elite USB-C Dock G4	4	Dual 2K @ 60Hz Single 4K @ 60Hz (3840 x 1440)	1xHDMI, 2xDP	
HP USB-C Universal Dock	3	Dual 4K @ 60Hz Single 5K @ 60Hz	2xDP	
HP USB-C Travel Dock	2	Single 2K @ 60Hz	1xHDMI, 1xVGA	Single external display Only HDMI or VGA at the time
HP USB-C Mini Dock	2	Single 4K @ 30Hz	1xHDMI, 1xVGA	Single external display Only HDMI or VGA at the time

STORAGE AND DRIVES

Primary M.2 Storage

- 128 GB SATA-3 SS TLC¹⁰**
- 256 GB PCIe® NVMe™ Value SS TLC¹⁰**
- 256 GB PCIe® Gen3x4 NVMe™ SS TLC¹⁰**
- 256 GB SATA-3 TLC Opal 2¹⁰**
- 512 GB PCIe® Gen3x4 NVMe™ SS TLC¹⁰**
- 512 GB PCIe® Gen3x4 NVMe™ SS TLC Opal 2¹⁰**
- 512 GB PCIe® Value¹⁰**
- 1 TB PCIe® Gen3 x4 NVMe™ SS TLC¹⁰**

10. For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10) is reserved for system recovery software.

MEMORY

Maximum Memory

32 GB DDR4-2400 SDRAM

Memory

- 32 GB DDR4-2400 SDRAM (2 x 16 GB)¹¹**
- 16 GB DDR4-2400 SDRAM (1 x 16 GB)¹¹**
- 16 GB DDR4-2400 SDRAM (2 x 8 GB)¹¹**

Features

8 GB DDR4-2400 SDRAM (1 x 8 GB)¹¹
8 GB DDR4-2400 SDRAM (2 x 4 GB)¹¹
4 GB DDR4-2400 SDRAM (1 x 4 GB)¹¹

Memory Slots

2 SODIMM

Both slots are customer accessible / upgradeable

DDR4 SODIMMS, system runs at 2400

Supports Dual Channel Memory

11. 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

WLAN

**Intel® Dual Band Wireless-AC 9260 802.11 a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 Combo, non-vPro™¹²
Intel® AX200 Wi-Fi 6¹⁶ (2x2) and Bluetooth® 5 Combo, non-vPro™ (supporting gigabit file transfer speeds)
Realtek RTL8822BE 802.11ac (2x2) and Bluetooth® 4.2 Combo¹²**

WWAN

Intel® XMM™ 7360 LTE-Advanced Cat 9¹³

NFC

NXP NPC300 Near Field Communication Module

Miracast

Native Miracast Support¹⁴

Ethernet

Realtek PCIe GbE Family Controller 10/100/1000¹⁵

12. Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited.

13. WWAN module 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.

14. Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.

15. 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.

16. 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. Feature available in Q3'19.

AUDIO/MULTIMEDIA

Audio

Audio by Bang & Olufsen

Integrated 3 Multi Array Microphone

2 Integrated Stereo Speakers

Features

Camera

720p HD camera^{6,9}

720p HD+IR camera^{6,9,17}

Sensors

Ambient light sensor (Select models only)

Hall Sensor

6. HD content required to view HD images.

9. Sold separately or as an optional feature.

17. Internet access required.

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

Keyboard

HP Premium Collaboration Keyboard, spill resistant with drain

Backlit keyboard available as an option

Pointing Device

Clickpad with multi-touch gestures enabled, taps enabled as default

Microsoft Precision Touchpad Default Gestures Support

Function Keys

F1 - Display Switching

F2 - Blank or Privacy

F3 - Brightness Down

F4 - Brightness Up

F5 - Audio Mute

F6 - Volume Down

F7 - Volume Up

F8 - Mic Mute

F9 - Blank or Backlit Toggle

F10 - numlk

F11 - Wireless

F12 - Calendar

Share/Present

Call Answer

Call End

Hidden Function Keys

Fn+R - Break

Fn+S - Sys Rq

Fn+C - Scroll Lock

Fn+E - Insert

Fn +W - Pause

Features

SOFTWARE AND SECURITY

Preinstalled Software

BIOS

HP BIOSphere Gen5¹⁸

HP Drive Lock & Automatic Drive Lock¹⁹

BIOS Update via Network

Master Boot Record Security

Power On Authentication

Secure Erase²⁰

Absolute Persistence Module²¹

Pre-boot Authentication

Software

HP Native Miracast Support²²

HP Connection Optimizer

HP Image Assistant

HP Hotkey Support

HP JumpStart

HP Support Assistant²³

HP Noise Cancellation Software

Buy Office (Sold separately)

Manageability Features

HP Driver Packs²⁴

HP System Software Manager (SSM)

HP BIOS Config Utility (BCU)

HP Client Catalog

HP Manageability Integration Kit Gen3²⁵

HP Cloud Recovery²⁶

Client Security Software

HP Client Security Manager Gen5²⁷

HP Fingerprint Sensor²⁸

HP Power On Authentication

Windows Defender²⁹

Security Management

Pre-boot Authentication

TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified)³⁰

SATA 0,1 port disablement (via BIOS)

USB enable/disable (via BIOS)

Power-on password (via BIOS)

Setup password (via BIOS)

Features

Support for chassis padlocks and cable lock devices

HP Sure Click³¹

HP Sure Start For AMD³²

Sure Run Gen2³³

Sure Recover Gen2³⁴

Sure Sense³⁵

Security

TPM

Model: Infineon SLB9670

Version: 7.85

Revision: TPM 2.0

FIPS 140-2 Compliant: Yes (select models only)

Smartcard Reader

Model number: Alcor AU9560

FIPS 201 Compliant: Yes

IPv6 Certification:

Yes/No

MD5 Hash: **Please follow the instructions below to access MD5 Hash.**

Log-on to <http://hp.com/support>, enter your product name, select software and drivers, select OS, select driver. After selecting the driver, click on "Associated files" and then click on "Download". When opening the file, under "Purpose" you should see the appropriate "SOFTPAQ MD5:" Field

Graphics (Intel Video Driver): TBD

WWAN: TBD

WLAN: TBD

Is the BIOS on this notebook ISO/IEC 19678:2015 (formerly NIST 800-147) compliant?:

Yes

UEFI version: 2.6

18. HP BIOSphere Gen5 is available on select HP Pro and Elite PCs. See product specifications for details. Features may vary depending on the platform and configurations.

19. HP Drive Lock & Automatic Drive Lock is not supported on NVMe drives

20. HP Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane™.

21. 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.

22. Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.

Features

23. HP Support Assistant requires Windows and Internet access.
24. HP Driver Packs not preinstalled, however available for download at <http://www.hp.com/go/clientmanagement>.
25. HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.
26. HP Cloud Recovery is available for HP Elite and Pro desktops and laptops PCs with Intel® or AMD processors and requires an open, wired network connection. Note: You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Detail please refer to: <https://support.hp.com/us-en/document/c05115630>
27. HP Client Security Manager Gen5 requires Windows and is available on the select HP Pro and Elite PCs. See product specifications for details.
28. HP Fingerprint Sensor sold separately or as an optional feature.
29. Windows Defender Opt in and internet connection required for updates.
30. Firmware TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).re TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).
31. HP Sure Click is available on most HP PCs and supports Microsoft® Internet Explorer and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode, when Microsoft Office or Adobe Acrobat are installed.
32. HP Sure Start for AMD is available on select HP PCs with AMD processors. See product specifications for availability.
33. HP Sure Run Gen2: See product specifications for availability.
34. HP Sure Recover Gen2: See product specifications for availability. Requires an open, wired network connection. Not available on platforms with multiple internal storage drives. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data. HP Sure Recover (Gen1) does not support platforms with Intel® Optane™.
35. HP Sure Sense requires Windows 10. See product specifications for availability.

Features

POWER

Power Supply

- HP Smart 45 W External AC power adapter³⁶
- HP Smart 45 W External AC power adapter, 2-prong (Japan only)³⁶
- HP Smart 65 W External AC power adapter³⁶
- HP Smart 65 W EM External AC power adapter³⁶
- 45 W USB Type-C™ adapter³⁶
- 65 W USB Type-C™ adapter³⁶

Primary Battery

- HP Long Life 3-cell, 50 Wh Li-ion^{37, 38}
- Support HP Fast Charge (Up to 50% in 30 minutes with 65W AC Adapter)^{37, 38}

Battery Life

- Battery Life up to 15 hours and 15 minutes (2nd Gen AMD® Ryzen™ PRO APU processor, 13.3" 400 nits panel and 3-cell 50Whr battery)³⁹

Power Cord

- 2-wire plug - 1.0m³⁶
- 3-wire plug - 1.0m³⁶
- 3-wire plug - 1.8m³⁶
- Duckhead power cord - 1.0m³⁶
- Duckhead power cord - 1.8m³⁶

36. Availability may vary by country.

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

38. Recharges the battery up to 50% within 30 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.

39. 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.

WEIGHTS & DIMENSIONS

Weight

- Starting at 2.94 lb (non-touch); Starting at 3.18 lb (touch)⁴⁰
- Starting at 1.33 kg (non-touch); Starting at 1.44 kg (touch)⁴⁰

Product Dimensions (w x d x h)

Non-Touch

- 12.22 x 9.03 x 0.7 in
- 31.04 x 22.93 x 1.77 cm

Touch

- 12.22 x 9.03 x 0.7 in
- 31.04 x 22.93 x 1.79 cm

40. Weight will vary by configuration.

Features

Features

PORTS/SLOTS

Ports

- 1 USB Type-C™ (Alt Mode)
- 2 USB 3.2 Gen 1 (1 charging)
- 1 HDMI 2.0⁴¹
- 1 RJ-45 / Ethernet
- 1 Docking connector
- 1 Headphone/microphone combo
- 1 AC power
- 1 SIM card slot⁴²
- 1 Smartcard reader⁴²

41. HDMI cable sold separately.

42. Sold separately or as an optional feature.

SERVICE AND SUPPORT

HP Services offers 1-year or 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 same 1-year or 3-year limited 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>.⁴³

43. 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.

Features

Technical Specifications

ENVIRONMENTAL & INDUSTRY

<p><i>Eco-Label Certifications & declarations</i></p>	<p>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:</p> <ul style="list-style-type: none"> • IT ECO declaration • US ENERGY STAR® • EPEAT® Silver registered in the United States. Based on US EPEAT registration according to IEEE 1680.1-2018 EPEAT. Status varies by country. See http://www.epeat.net for more information. 		
<p><i>System Configuration</i></p>	<p>The configuration used for the Energy Consumption and Declared Noise Emissions data for the Notebook model is based on a Typically Configured Notebook.</p>		
<p><i>Energy Consumption (in accordance with US ENERGY STAR® test method)</i></p>	<p>115VAC, 60Hz</p>	<p>230VAC, 50Hz</p>	<p>100VAC, 60Hz</p>
<p>Normal Operation (Short idle)</p>	<p>7.69 W</p>	<p>7.72</p>	<p>7.46</p>
<p>Normal Operation (Long idle)</p>	<p>5.88 W</p>	<p>6.11</p>	<p>5.88</p>
<p>Sleep</p>	<p>0.79 W</p>	<p>0.83</p>	<p>0.78</p>
<p>Off</p>	<p>0.40 W</p>	<p>0.43</p>	<p>0.41</p>
	<p>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.</p>		
<p><i>Heat Dissipation*</i></p>	<p>115VAC, 60Hz</p>	<p>230VAC, 50Hz</p>	<p>100VAC, 60Hz</p>
<p>Normal Operation (Short idle)</p>	<p>26 BTU/hr</p>	<p>26 BTU/hr</p>	<p>25 BTU/hr</p>
<p>Normal Operation (Long idle)</p>	<p>20 BTU/hr</p>	<p>21 BTU/hr</p>	<p>20 BTU/hr</p>
<p>Sleep</p>	<p>3 BTU/hr</p>	<p>3 BTU/hr</p>	<p>2 BTU/hr</p>
<p>Off</p>	<p>1 BTU/hr</p>	<p>1 BTU/hr</p>	<p>1 BTU/hr</p>
	<p>Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.</p>		

Technical Specifications

<i>Declared Noise Emissions</i> (in accordance with ISO 7779 and ISO 9296)	Sound Power ($L_{WA,d}$, bels)	Sound Pressure (L_{pAm} , decibels)	
Typically Configured – Idle	2.5	15	
Fixed Disk – Random writes	3	23	
Longevity and Upgrading	<p>This product can be upgraded, possibly extending its useful life by several years. Upgradeable features and/or components contained in the product may include:</p> <ul style="list-style-type: none"> • 3 USB ports • 1 PC card slot (type I/II) • 1 ExpressCard/54 slot • 1 IEEE 1394 Port • 2 SODIMM memory slots • Optional expansion base docking station • 1 multi-bay II storage port • Interchangeable HDD <p>Spare parts are available throughout the warranty period and or for up to “5” years after the end of production.</p>		
Batteries	<p>This battery(s) in this product comply with EU Directive 2006/66/EC</p> <p>Batteries used in the product do not contain: Mercury greater the 1ppm by weight Cadmium greater than 20ppm by weight</p> <p>Battery size: CR2032 (coin cell) Battery type: Lithium</p>		
<i>Additional Information</i>	<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 1680.1 (EPEAT) standard at the Gold level, see http://www.epeat.net • Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043. • This product contains 3% post-consumer recycled plastic (by wt.) • This product is 94.5% recycle-able when properly disposed of at end of life. 		
<i>Packaging Materials</i>	<i>External:</i>	PAPER/Corrugated	261 g
	<i>Internal:</i>	PLASTIC/EPE (Expanded Polyethylene)	63 g
		PLASTIC/Polypropylene - PP	3 g
		PLASTIC/Polyethylene low density	14 g
<i>Material Usage</i>	<p>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):</p> <ul style="list-style-type: none"> • Asbestos • Certain Azo Colorants 		

Technical Specifications

	<ul style="list-style-type: none"> • 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)
<p><i>Packaging Usage</i></p>	<p>HP follows these guidelines to decrease the environmental impact of product packaging:</p> <ul style="list-style-type: none"> • 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.
<p><i>End-of-life Management and Recycling</i></p>	<p>HP Inc. 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.</p> <p>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.</p>
<p><i>HP Inc. Corporate Environmental Information</i></p>	<p>For more information about HP’s commitment to the environment:</p> <p>Global Citizenship Report</p> <p>http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html</p> <p>Eco-label certifications</p> <p>http://www8.hp.com/us/en/hp-information/environment/ecolabels.html</p>

Technical Specifications

	<p>ISO 14001 certificates:</p> <p>http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/PC_GBU_Product_Design_ISO_14K_Certificate.pdf</p> <p>and</p> <p>http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf</p>
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SYSTEM UNIT

<i>Stand-Alone Power Requirements (AC Power)</i>	<i>Nominal Operating Voltage</i>	19V
	<i>Average Operating Power</i>	Win 10
	<i>Integrated Graphics</i>	AMD has no this data (APU is 15 W)
	<i>Max Operating Power</i>	UMA <45 W
<i>Temperature</i>	<i>Operating</i>	32° to 95° F (0° to 35° C)
	<i>Non-operating</i>	-4° to 140° F (-20° to 60° C)
<i>Relative Humidity</i>	<i>Operating</i>	10% to 90%, non-condensing
	<i>Non-operating</i>	5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature
<i>Shock</i>	<i>Operating</i>	40 G, 2 ms, half-sine
	<i>Non-operating</i>	200 G, 2 ms, half-sine
<i>Random Vibration</i>	<i>Operating</i>	0.75 grms
	<i>Non-operating</i>	1.50 grms
<i>Altitude (unpressurized)</i>	<i>Operating</i>	-50 to 10,000 ft (-15.24 to 3,048 m)
	<i>Non-operating</i>	-50 to 40,000 ft (-15.24 to 12,192 m)
<i>Planned Industry Standard Certifications</i>	<i>UL</i>	Yes
	<i>CSA</i>	Yes
	<i>FCC Compliance</i>	Yes
	<i>ENERGY STAR®</i>	Yes, Select models⁴⁴
	<i>EPEAT® 2019</i>	Yes, Silver in U.S.⁴⁵
	<i>Australia / NZ A-Tick Compliance</i>	Yes
	<i>CCC</i>	Yes
	<i>Japan VCCI Compliance</i>	Yes
	<i>KC</i>	Yes
	<i>BSMI</i>	Yes
	<i>CE Marking Compliance</i>	Yes
	<i>GOST</i>	Yes
	<i>Saudi Arabian Compliance (ICCP)</i>	Yes
	<i>UKRSERTCOMPUTER</i>	Yes

44. Configurations of the HP Elitebook 735 G6 that are ENERGY STAR® certified are identified as HP Elitebook 735 G6 ENERGY STAR on HP websites and on <http://www.energystar.gov>.

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

Technical Specifications

DISPLAYS

<i>Panel LCD 13.3 inch diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 45 percent cg 250 nits eDP 1.2 w/o PSR slim NWBZ</i>	<i>Outline Dimensions (W x H)</i>	300.56 x 187.77 mm (max) (w/ PCB & w/o bracket)
	<i>Active Area</i>	293.76 x 165.24 mm (typ.)
	<i>Weight</i>	260 g (max)
	<i>Diagonal Size</i>	13.3 inch
	<i>Thickness</i>	3.0 mm (max)
	<i>Interface</i>	eDP 1.2 (2 lane)
	<i>Surface Treatment</i>	Anti-Glare
	<i>Touch Enabled</i>	No
	<i>Contrast Ratio</i>	600:1 (typ.)
	<i>Refresh Rate</i>	60 Hz
	<i>Brightness</i>	250 nits (typ.)
	<i>Pixel Resolution</i>	1920 x 1080 (FHD)
	<i>Format of LCD Pixel Arrangement</i>	RGB
	<i>Backlight</i>	LED
	<i>Color Gamut Coverage</i>	45% NTSC
	<i>Color Depth</i>	6 bits
	<i>Viewing Angle</i>	UWVA 85/85/85/85

<i>Panel LCD 13.3 inch diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 45 percent cg 250 nits eDP slim Touch on Panel Narrow Bezel</i>	<i>Outline Dimensions (W x H)</i>	300.56 x 187.77
	<i>Active Area</i>	293.76 x 165.24 mm (typ.)
	<i>Weight</i>	268 g (max)
	<i>Diagonal Size</i>	13.3 inch
	<i>Thickness</i>	3.2mm (max)
	<i>Interface</i>	eDP 1.2
	<i>Surface Treatment</i>	Anti-Glare On-cell
	<i>Touch Enabled</i>	Yes
	<i>Contrast Ratio</i>	600:1 (typ.)
	<i>Refresh Rate</i>	60 Hz
	<i>Brightness</i>	250 nits
	<i>Pixel Resolution</i>	1920 x 1080 (FHD)
	<i>Format of LCD Pixel Arrangement</i>	RGB
	<i>Backlight</i>	LED
	<i>Color Gamut Coverage</i>	45% NTSC
	<i>Color Depth</i>	6 bits
	<i>Viewing Angle</i>	UWVA 85/85/85/85

Technical Specifications

<i>Panel LCD 13.3 inch diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 72 percent cg 400 nits eDP 1.4+PSR2 Ultraslim Narrow Bezel</i>	<i>Outline Dimensions (W x H)</i>	299.06 x 185.54 mm (max)
	<i>Active Area</i>	293.76 x 165.24 mm (typ.)
	<i>Weight</i>	170 g (max)
	<i>Diagonal Size</i>	13 inch
	<i>Thickness</i>	2.0 mm (max)
	<i>Interface</i>	eDP 1.4 + PSR2 (2 lane)
	<i>Surface Treatment</i>	Anti-Glare
	<i>Touch Enabled</i>	No
	<i>Contrast Ratio</i>	1200:1 (typ.)
	<i>Refresh Rate</i>	60 Hz
	<i>Brightness</i>	400 nits
	<i>Pixel Resolution</i>	1920 x 1080 (FHD)
	<i>Format of LCD Pixel Arrangement</i>	RGB
	<i>Backlight</i>	LED
	<i>Color Gamut Coverage</i>	72% NTSC
	<i>Color Depth</i>	8 bits
	<i>Viewing Angle</i>	UWVA 85/85/85/85

<i>Panel LCD 13.3 inch FHD (1920 x 1080) Anti-Glare WLED UWVA 72percent cg 1000nits eDP 1.4+PSR2 flat Privacy NWBZ*</i>	<i>Outline Dimensions (W x H)</i>	299.06 x 186.54 mm (max)
	<i>Active Area</i>	293.76 x 165.24 mm (typ.)
	<i>Weight</i>	255 g (max)
	<i>Diagonal Size</i>	13.3 inch
	<i>Thickness</i>	3.0 mm (max)
	<i>Interface</i>	eDP 1.4 + PSR2 (4 lane)
	<i>Surface Treatment</i>	Bright-View (BV)
	<i>Touch Enabled</i>	No
	<i>Contrast Ratio</i>	2000:1 (typ.)
	<i>Refresh Rate</i>	60 Hz
	<i>Brightness**</i>	1000 nits
	<i>Pixel Resolution</i>	1920 x 1080 (FHD)
	<i>Format of LCD Pixel Arrangement</i>	RGB
	<i>Backlight</i>	LED
	<i>Color Gamut Coverage</i>	72% NTSC
	<i>Color Depth</i>	8 bits
	<i>Viewing Angle</i>	UWVA 85/85/85/85

***Available in Q3'19**

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

****Touch-enabled display and Sure View privacy panel will lower actual brightness**

Technical Specifications

STORAGE

<i>SSD 128 GB 2280 M2 SATA-3 TLC</i>	<i>Form Factor</i>	M.2 2280
	<i>Capacity</i>	128 GB
	<i>NAND Type</i>	TLC
	<i>Height</i>	0.09 in (2.3 mm)
	<i>Width</i>	0.87 in (22 mm)
	<i>Weight</i>	0.02 lb (10 g)
	<i>Interface</i>	ATA-8, SATA 3.0
	<i>Maximum Sequential Read</i>	Around 540 ~ 560 MB/s
	<i>Maximum Sequential Write</i>	Around 380 ~ 530 MB/s
	<i>Logical Blocks</i>	250069680
	<i>Operating Temperature</i>	32° to 158°F (0° to 70°C) [ambient temp]
	<i>Features</i>	ATA Security; DIPM; TRIM; DEVSLP

<i>SSD 1 TB 2280 PCIe-3x4 NVMe Three Layer Cell single-sided</i>	<i>Form Factor</i>	M.2 2280
	<i>Capacity</i>	1 TB
	<i>NAND Type</i>	TLC
	<i>Height</i>	0.09 in (2.3 mm)
	<i>Width</i>	0.87 in (22 mm)
	<i>Weight</i>	0.02 lb (10 g)
	<i>Interface</i>	PCIe NVMe Gen3X4
	<i>Maximum Sequential Read</i>	Around 3200 ~ 3480 MB/s
	<i>Maximum Sequential Write</i>	Around 2400 ~ 3037 MB/s
	<i>Logical Blocks</i>	2000409264
	<i>Operating Temperature</i>	32° to 158°F (0° to 70°C) [ambient temp]
	<i>Features</i>	ATA Security; TRIM; L1.2

<i>SSD 256 GB 2280 M2 PCIe-3x4 SS NVMe TLC</i>	<i>Form Factor</i>	M.2 2280
	<i>Capacity</i>	256 GB
	<i>NAND Type</i>	TLC
	<i>Height</i>	0.09 in (2.3 mm)
	<i>Width</i>	0.87 in (22 mm)
	<i>Weight</i>	0.02 lb (10 g)
	<i>Interface</i>	PCIe NVMe Gen3X4
	<i>Maximum Sequential Read</i>	Around 2900 ~ 3167 MB/s
	<i>Maximum Sequential Write</i>	Around 1300 ~ 1663 MB/s
	<i>Logical Blocks</i>	500118192
	<i>Operating Temperature</i>	32° to 158°F (0° to 70°C) [ambient temp]

Technical Specifications

	Features	ATA Security; TRIM; L1.2
<i>SSD 256 GB 2280 M2 SATA-3 Self Encrypted OPAL2 Three Layer Cell</i>	<i>Form Factor</i>	M.2 2280
	<i>Capacity</i>	256 GB
	<i>NAND Type</i>	TLC
	<i>Height</i>	0.09 in (2.3 mm)
	<i>Width</i>	0.87 in (22 mm)
	<i>Weight</i>	0.02 lb (10 g)
	<i>Interface</i>	ATA-8, SATA 3.0
	<i>Maximum Sequential Read</i>	Around 530 ~ 560 MB/s
	<i>Maximum Sequential Write</i>	Around 500 ~ 530 MB/s
	<i>Logical Blocks</i>	500118192
	<i>Operating Temperature</i>	32° to 158°F (0° to 70°C) [ambient temp]
	<i>Features</i>	ATA Security; TCG OPAL 2.0; DIPM; TRIM; DEVSLP
<i>SSD 256 GB 2280 PCIe NVMe Value</i>	<i>Form Factor</i>	M.2 2280
	<i>Capacity</i>	256 GB
	<i>NAND Type</i>	TLC
	<i>Height</i>	0.09 in (2.3 mm)
	<i>Width</i>	0.87 in (22 mm)
	<i>Weight</i>	0.02 lb (10 g)
	<i>Interface</i>	PCIe NVMe
	<i>Maximum Sequential Read</i>	Around 1500 ~ 1700 MB/s
	<i>Maximum Sequential Write</i>	Around 780 ~ 1300 MB/s
	<i>Logical Blocks</i>	500118192
	<i>Operating Temperature</i>	32° to 158°F (0° to 70°C) [ambient temp]
	<i>Features</i>	ATA Security; TRIM; L1.2
<i>SSD 512 GB 2280 M2 PCIe-3x4 SS NVMe TLC</i>	<i>Form Factor</i>	M.2 2280
	<i>Capacity</i>	512 GB
	<i>NAND Type</i>	TLC
	<i>Height</i>	0.09 in (2.3 mm)
	<i>Width</i>	0.87 in (22 mm)
	<i>Weight</i>	0.02 lb (10 g)
	<i>Interface</i>	PCIe NVMe Gen3X4
	<i>Maximum Sequential Read</i>	Around 2700 ~ 3400 MB/s
	<i>Maximum Sequential Write</i>	Around 1390 ~ 2956 MB/s

Technical Specifications

<i>Logical Blocks</i>	1000215215
<i>Operating Temperature</i>	32° to 158°F (0° to 70°C) [ambient temp]
<i>Features</i>	ATA Security; TRIM; L1.2

<i>SSD 512 GB 2280 PCIe NVMe Value</i>	<i>Form Factor</i>	M.2 2280
	<i>Capacity</i>	512 GB
	<i>NAND Type</i>	TLC/QLC
	<i>Height</i>	0.09 in (2.3 mm)
	<i>Width</i>	0.87 in (22 mm)
	<i>Weight</i>	0.02 lb (10 g)
	<i>Interface</i>	PCIe NVMe
	<i>Maximum Sequential Read</i>	Around 1500 ~ 1700 MB/s
	<i>Maximum Sequential Write</i>	Around 860 ~ 1500 MB/s
	<i>Logical Blocks</i>	1000215215
	<i>Operating Temperature</i>	32° to 158°F (0° to 70°C) [ambient temp]
<i>Features</i>	ATA Security; TRIM; L1.2	

<i>SSD 512 GB 2280 PCIe-3x4 NVMe Self Encrypted OPAL2 Three Layer Cell</i>	<i>Form Factor</i>	M.2 2280
	<i>Capacity</i>	512 GB
	<i>NAND Type</i>	TLC
	<i>Height</i>	0.09 in (2.3 mm)
	<i>Width</i>	0.87 in (22 mm)
	<i>Weight</i>	0.02 lb (10 g)
	<i>Interface</i>	PCIe NVMe Gen3X4
	<i>Maximum Sequential Read</i>	Around 2900 ~ 3400 MB/s
	<i>Maximum Sequential Write</i>	Around 1000 ~ 2500 MB/s
	<i>Logical Blocks</i>	1000215216
	<i>Operating Temperature</i>	32° to 158°F (0° to 70°C) [ambient temp]
<i>Features</i>	ATA Security; TCG Opal 2.0; FIPS; DIPM; TRIM; DEVSLP	

Technical Specifications

NETWORKING/COMMUNICATIONS

<p>Intel® 9260 802.11a/b/g/n/ac (2 x 2) Wi-Fi® and Bluetooth® 5.0 Combo¹ Non-vPro</p>	<p>Wireless LAN Standards</p>	<p>IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac IEEE 802.11d IEEE 802.11e IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v</p>
	<p>Interoperability</p>	<p>Wi-Fi® certified</p>
	<p>Frequency Band</p>	<p>802.11b/g/n • 2.402 – 2.482 GHz 802.11a/n/ac • 4.9 – 4.95 GHz (Japan) • 5.15 – 5.25 GHz • 5.25 – 5.35 GHz • 5.47 – 5.725 GHz • 5.825 – 5.850 GHz</p>
	<p>Data Rates</p>	<p>• 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)</p>
	<p>Modulation</p>	<p>Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM</p>
	<p>Security³</p>	<p>• IEEE and WiFi compliant 64 / 128 bit WEP encryption for a/b/g mode only • AES-CCMP: 128 bit in hardware • 802.1x authentication • WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES. • WPA2 certification • IEEE 802.11i • WAPI</p>
	<p>Network Architecture Models</p>	<p>Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)</p>
	<p>Roaming</p>	<p>IEEE 802.11 compliant roaming between access points</p>
	<p>Output Power²</p>	<p>• 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</p>

Technical Specifications

<i>Power Consumption</i>	<ul style="list-style-type: none"> • 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
<i>Power Management</i>	<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 10mW • Radio disabled 8 mW
<i>Receiver Sensitivity⁴</i>	<p>ACPI compliant power management 802.11 compliant power saving mode</p> <p>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</p>
<i>Antenna type</i>	<p>High efficiency antenna with spatial diversity, mounted in the display enclosure</p> <p>Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications</p>
<i>Form Factor</i>	PCI-Express M.2 MiniCard
<i>Dimensions</i>	<p>1. Type 2230: 2.3 x 22.0 x 30.0 mm</p> <p>2. Type 1216: 1.67 x 12.0 x 16.0 mm</p>
<i>Weight</i>	<p>1. Type 2230: 2.8g</p> <p>2. Type 126: 1.3g</p>
<i>Operating Voltage</i>	3.3v +/- 9%
<i>Temperature</i>	<p>Operating 14° to 158° F (-10° to 70° C)</p> <p>Non-operating -40° to 176° F (-40° to 80° C)</p>
<i>Humidity</i>	<p>Operating 10% to 90% (non-condensing)</p> <p>Non-operating 5% to 95% (non-condensing)</p>
<i>Altitude</i>	<p>Operating 0 to 10,000 ft (3,048 m)</p> <p>Non-operating 0 to 50,000 ft (15,240 m)</p>
<i>LED Activity</i>	<p>LED Amber – Radio OFF</p> <p>LED OFF – Radio ON</p>

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

<i>Bluetooth Specification</i>	4.0/4.1/4.2/5.0 Compliant
<i>Frequency Band</i>	2402 to 2480 MHz
<i>Number of Available Channels</i>	Legacy: 0~79 (1 MHz/CH) BLE: 0~39 (2 MHz/CH)

Technical Specifications

<i>Signaling Data Rate</i>	Legacy: 3 Mbps signaling data rate¹ 2.17 Mbps BLE: 1 Mbps signaling data rate¹ 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-DH5) or 864 kbps symmetric (3-EV5)
<i>Transmit Power</i>	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 4 dBm for BR and EDR.
<i>Power Consumption</i>	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW
<i>Electrical Interface</i>	USB 2.0 compliant
<i>Bluetooth Software Supported</i>	Microsoft Windows Bluetooth Software
<i>Power Management Certifications</i>	Microsoft Windows ACPI, and USB Bus Support FCC (47 CFR) Part 15C, Section 15.247 & 15.249
<i>Power Management Certifications</i>	ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark
<i>Bluetooth Profiles Supported</i>	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 is required. Availability of public wireless access point is limited.**
- 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.**

Technical Specifications

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).

<p>802.11a/b/g/n/ac (2 x 2) Wireless LAN Standards Wi-Fi® and Bluetooth® 4.2 Combo¹</p>	<p>IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac</p>
<p><i>Interoperability</i></p>	<p>Wi-Fi® certified</p>
<p><i>Frequency Band</i></p>	<p>802.11b/g/n • 2.402 – 2.482 GHz 802.11a/n • 4.9 – 4.95 GHz (Japan) • 5.15 – 5.25 GHz • 5.25 – 5.35 GHz • 5.47 – 5.725 GHz • 5.825 – 5.850 GHz</p>
<p><i>Data Rates</i></p>	<p>• 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, and 80MHz)</p>
<p><i>Modulation</i></p>	<p>Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM</p>
<p><i>Security³</i></p>	<p>• IEEE and Wi-Fi compliant 64 / 128 bit WEP encryption for a/b/g mode only • AES-CCMP: 128 bit in hardware • 802.1x authentication • WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES. • WPA2 certification • IEEE 802.11i • WAPI</p>
<p><i>Network Architecture Models</i></p>	<p>Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)</p>
<p><i>Roaming</i></p>	<p>IEEE 802.11 compliant roaming between access points</p>
<p><i>Output Power²</i></p>	<p>• 802.11b: +14dBm minimum • 802.11g: +12dBm minimum • 802.11a: +12dBm minimum • 802.11n HT20(2.4GHz): +12dBm minimum • 802.11n HT40(2.4GHz): +12dBm minimum • 802.11n HT20(5GHz): +10dBm minimum • 802.11n HT40(5GHz): +10dBm minimum • 802.11ac VHT80(5GHz): +10dBm minimum</p>

Technical Specifications

<i>Power Consumption</i>	<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
<i>Power Management</i>	ACPI and PCI Express compliant power management 802.11 compliant power saving mode
<i>Receiver Sensitivity³</i>	<p>802.11b, 1Mbps: -93.5dBm maximum</p> <p>802.11b, 11Mbps: -84dBm maximum</p> <p>802.11a/g, 6Mbps: -86dBm maximum</p> <p>802.11a/g, 54Mbps: -72dBm maximum</p> <p>802.11n, MCS07: -67dBm maximum</p> <p>802.11n, MCS15: -64dBm maximum</p> <p>802.11ac, MCS0: -84dBm maximum</p> <p>802.11ac, MCS9: -59dBm maximum</p>
<i>Antenna type</i>	<p>High efficiency antenna with spatial diversity, mounted in the display enclosure</p> <p>Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications</p>
<i>Form Factor</i>	PCI-Express M.2 MiniCard
<i>Dimensions</i>	Type 2230: 2.3 x 22.0 x 30.0 mm
<i>Weight</i>	Type 2230: 2.8g
<i>Operating Voltage</i>	3.3v +/- 9%
<i>Temperature</i>	<p>Operating 14° to 158° F (-10° to 70° C)</p> <p>Non-operating -40° to 176° F (-40° to 80° C)</p>
<i>Humidity</i>	<p>Operating 10% to 90% (non-condensing)</p> <p>Non-operating 5% to 95% (non-condensing)</p>
<i>Altitude</i>	<p>Operating 0 to 10,000 ft (3,048 m)</p> <p>Non-operating 0 to 50,000 ft (15,240 m)</p>
<i>LED Activity</i>	<p>LED Amber – Radio OFF</p> <p>LED OFF – Radio ON</p>

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

<i>Bluetooth Specification</i>	4.0/4.1/4.2 Compliant
<i>Frequency Band</i>	2402 to 2480 MHz
<i>Number of Available Channels</i>	Legacy: 0~79 (1 MHz/CH) BLE: 0~39 (2 MHz/CH)

Technical Specifications

<i>Signaling Data Rate</i>	Legacy: 3 Mbps signaling data rate¹ 2.17 Mbps BLE: 1 Mbps signaling data rate¹ 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-DH5) or 864 kbps symmetric (3-EV5)
<i>Transmit Power</i>	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 4 dBm for BR and EDR.
<i>Power Consumption</i>	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW
<i>Electrical Interface</i>	USB 2.0 compliant
<i>Bluetooth Software Supported</i>	Microsoft Windows Bluetooth Software
<i>Power Management</i>	Microsoft Windows ACPI, and USB Bus Support
<i>Certifications</i>	FCC (47 CFR) Part 15C, Section 15.247 & 15.249
<i>Power Management Certifications</i>	ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark
<i>Bluetooth Profiles Supported</i>	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 is required. Availability of public wireless access point is limited.**
- 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).**

Technical Specifications

<p>Intel® Wi-Fi® 6⁵ AX200 + BT5 (802.11ax 2x2, non- vPro, supporting gigabit file transfer speeds) non-vPro</p>	<p>Wireless LAN Standards</p> <ul style="list-style-type: none"> IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac IEEE 802.11ax IEEE 802.11d IEEE 802.11e IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v
<p><i>Interoperability</i></p> <p><i>Frequency Band</i></p>	<p>Wi-Fi® certified</p> <p>802.11b/g/n/ax</p> <ul style="list-style-type: none"> • 2.402 – 2.482 GHz <p>802.11a/n/ac/ax</p> <ul style="list-style-type: none"> • 4.9 – 4.95 GHz (Japan) • 5.15 – 5.25 GHz • 5.25 – 5.35 GHz • 5.47 – 5.725 GHz • 5.825 – 5.850 GHz
<p><i>Data Rates</i></p>	<ul style="list-style-type: none"> •802.11b: 1, 2, 5.5, 11 Mbps •802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps •802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps •802.11n: MCS 0 ~ MCS 15, (20MHz, and 40MHz) •802.11ac: MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, 80MHz & 160MHz) • 802.11ax: MCS0 ~ MCS11, (1SS and 2SS) (20MHz, 40MHz, 80MHz & 160MHz)
<p><i>Modulation</i></p>	<p>Direct Sequence Spread Spectrum</p> <p>OFDM, BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024QAM</p>
<p><i>Security³</i></p>	<ul style="list-style-type: none"> •IEEE and Wi-Fi compliant 64 / 128 bit WEP encryption for a/b/g mode only •AES-CCMP: 128 bit in hardware •802.1x authentication •WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES. •WPA2 certification •IEEE 802.11i •WAPI
<p><i>Network Architecture</i></p> <p><i>Models</i></p> <p><i>Roaming</i></p>	<p>Ad-hoc (Peer to Peer)</p> <p>Infrastructure (Access Point Required)</p> <p>IEEE 802.11 compliant roaming between access points</p>

Technical Specifications

<i>Output Power²</i>	<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 • 802.11ac VHT160(5GHz): +11.5dBm minimum • 802.11ax HT40(2.4GHz): +10dBm minimum • 802.11ax VHT160(5GHz): +10dBm minimum 				
<i>Power Consumption</i>	<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 				
<i>Power Management</i>	ACPI and PCI Express compliant power management 802.11 compliant power saving mode				
<i>Receiver Sensitivity³</i>	<ul style="list-style-type: none"> • 802.11b, 1Mbps: -93.5dBm maximum • 802.11b, 11Mbps: -84dBm maximum • 802.11 a/g, 6Mbps: -86dBm maximum • 802.11 a/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 				
<i>Antenna type</i>	<p>High efficiency antenna with spatial diversity, mounted in the display enclosure</p> <p>Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications</p>				
<i>Form Factor</i>	PCI-Express M.2 MiniCard				
<i>Dimensions</i>	<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 				
<i>Weight</i>	<ol style="list-style-type: none"> 1. Type 2230: 2.8g 2. Type 126: 1.3g 				
<i>Operating Voltage</i>	3.3v +/- 9%				
<i>Temperature</i>	<table> <tr> <td><i>Operating</i></td> <td>14° to 158° F (-10° to 70° C)</td> </tr> <tr> <td><i>Non-operating</i></td> <td>-40° to 176° F (-40° to 80° C)</td> </tr> </table>	<i>Operating</i>	14° to 158° F (-10° to 70° C)	<i>Non-operating</i>	-40° to 176° F (-40° to 80° C)
<i>Operating</i>	14° to 158° F (-10° to 70° C)				
<i>Non-operating</i>	-40° to 176° F (-40° to 80° C)				
<i>Humidity</i>	<table> <tr> <td><i>Operating</i></td> <td>10% to 90% (non-condensing)</td> </tr> <tr> <td><i>Non-operating</i></td> <td>5% to 95% (non-condensing)</td> </tr> </table>	<i>Operating</i>	10% to 90% (non-condensing)	<i>Non-operating</i>	5% to 95% (non-condensing)
<i>Operating</i>	10% to 90% (non-condensing)				
<i>Non-operating</i>	5% to 95% (non-condensing)				

Technical Specifications

<i>Altitude</i>	<i>Operating</i>	0 to 10,000 ft (3,048 m)
	<i>Non-operating</i>	0 to 50,000 ft (15,240 m)

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

<i>Bluetooth Specification</i>	4.0/4.1/4.2/5.0/5.1 Compliant
<i>Frequency Band</i>	2402 to 2480 MHz
<i>Number of Available Channels</i>	Legacy: 0~79 (1 MHz/CH) BLE: 0~39 (2 MHz/CH)
<i>Signaling Data Rate</i>	Legacy: 3 Mbps signaling data rate¹ 2.17 Mbps BLE: 1 Mbps signaling data rate¹ 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-DH5) or 864 kbps symmetric (3-EV5)
<i>Transmit Power</i>	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 9.5 dBm for BR and EDR.
<i>Power Consumption</i>	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW
<i>Bluetooth Software Supported</i>	Microsoft Windows Bluetooth Software
<i>Power Management</i>	Microsoft Windows ACPI, and USB Bus Support
<i>Certifications</i>	FCC (47 CFR) Part 15C, Section 15.247 & 15.249
<i>Power Management Certifications</i>	ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark
<i>Bluetooth Profiles Supported</i>	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)

Technical Specifications

1. **Wireless access point and Internet service is required. Availability of public wireless access point is limited.**
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).**
5. **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. Feature available in Q3'19.**

<i>Intel® XMM™ 7360 LTE-Advanced CAT9¹</i>	<i>Technology/Operating bands</i>	<p>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).</p> <p>TDD LTE: 2600 (Band 38), 1900 (Band 39), 2400 (Band 40), 2500 (Band 41).</p> <p>HSPA+: 2100 (Band 1), 1900 (Band 2), 1700/2100 (Band 4), 850 (Band 5), 900 (Band 8) MHz</p>
	<i>Wireless protocol standards</i>	<p>3GPP Release 11 LTE Specification CAT.9, DL 60MHz BW throughput up to 450Mbps; UL 20MHz throughput up to 50Mbps</p> <p>WCDMA R99, 3GPP Release 5, 6, 7 and 8 UMTS Specification</p>
	<i>GPS</i>	<p>Standalone, A-GPS (MS-A, MS-B)</p>
	<i>GPS bands</i>	<p>1575.42 MHz ± 1.023 MHz, GLONASS 1596-1607MHz, Beidou 1561.098 MHz</p>
	<i>Maximum data rates</i>	<p>LTE: 450 Mbps (Download), 50 Mbps (Upload)</p> <p>DC-HSPA+: 42 Mbps (Download), 5.76 Mbps (Upload)</p> <p>HSPA+: 21Mbps (Download), 5.76 Mbps (Upload)</p>
	<i>Maximum output power</i>	<p>LTE: 23 dBm</p> <p>HSPA+: 23.5 dBm</p>
	<i>Maximum power consumption</i>	<p>LTE: 1,200 mA (peak); 900 mA (average)</p> <p>HSPA+: 1,100 mA (peak); 800 mA (average)</p>
	<i>Form Factor</i>	<p>M.2, 3042-S3 Key B</p>
	<i>Weight</i>	<p>5.8 g</p>
	<i>Dimensions (Length x Width x Thickness)</i>	<p>42 x 30 x 2.3 mm</p>

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. WWAN is an optional feature, requires

Technical Specifications

factory configuration and separately purchased service contract. Check with service provider for coverage and availability in your area. 4G LTE not available on all products, in all regions.

<i>Near Field Communications Controller (optional)</i>	<i>Dimensions (L x W x H)</i>	Module 25 mm by 10 mm by 2.0 mm
	<i>Chipset</i>	NPC300
	<i>System interface</i>	I2C
	<i>NFC RF standards</i>	ISO/IEC 14443 A ISO/IEC 14443 B ISO/IEC 15693 ISO/IEC 18092 ECMA-340 NFCIP-1 Target and Initiator ECMA-320 NFCIP-2
	<i>NFC Forum Support</i>	Tag Type 1, Type 2, Type3 and Type 4, NFCIP-1 and NFCIP-2
	<i>Reader (PCD-VCD) Mode(1)</i>	ISO/IEC 14443 A ISO/IEC 14443 B ISO/IEC 15693 MIFARE 1K MIFARE 4K MIFARE DESFire FeliCa Jewel and Topaz cards
	<i>Card Emulation (PICC-VICC) Mode(1)</i>	ISO/IEC 14443 A ISO/IEC 14443 B and B' MIFARE FeliCa
	<i>Frequency</i>	13.56 MHz
	<i>NFC Modes Supported</i>	Reader/Writer, Peer-to-Peer
	<i>Raw RF Data Rates</i>	106, 212, 424, 848 kbps
	<i>Operating temperature</i>	0°C to 70°C
	<i>Storage temperature</i>	-20°C to 125°C
	<i>Humidity</i>	10-90% operating 5-95% non-operating
<i>Supply Operating voltage</i>	4.35 to 5.25 Volts	
<i>I/O Voltage</i>	1.8V or 3.3V	
<i>Power Consumption (Booster enable, VBAT= 3.3V, VCC_BOOST = 5V)</i>	<i>Mode</i>	Power Consumption, Typical
	<i>Polling</i>	710.93 mW
	<i>Detected Test Tag Type 1</i>	152.09 mW
	<i>Detected Test Tag Type 2</i>	341.26 mW
	<i>Detected Test Tag Type 3</i>	383.76 mW

Technical Specifications

Detected Test Tag Type 4 **312.26 mW**
Antenna **Antenna connector, 0.5mm pitch, 7 connector FPC. Antenna matching is external to module.**

<p><i>Realtek RTK8111EPH 10/100/1000 Integrated NIC</i></p>	<p><i>Connector</i></p> <p><i>System Interface</i></p> <p><i>Data rates supported</i></p>	<p>RJ-45</p> <p>PCIe + SMBus</p> <p>10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14)</p> <p>100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30)</p> <p>1000 Mbit/s operation (1000BASE-T; IEEE 802.3ab; IEEE 8023 clauses 40)</p> <p>Auto-Negotiation (Automatic Speed Selection)</p> <p>Full Duplex Operation at all Speeds, Half Duplex operation at 10 and 100 Mbit/s</p>
	<p><i>IEEE Compliance</i></p>	<p>IEEE 802.1p QoS (Quality of Service) Support</p> <p>IEEE 802.1q VLAN support</p> <p>IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable)</p> <p>IEEE 802.3az EEE (Energy Efficient Ethernet)</p>
	<p><i>Performance</i></p>	<p>TCP/IP/UDP Checksum Offload (configurable)</p> <p>Protocol Offload (ARP & NS)</p> <p>Large send offload and Giant send offload</p> <p>Receiving Side Scaling</p> <p>Jumbo Frame 9K</p>
	<p><i>Power consumption</i></p>	<p>Cable Disconnection: 25mW</p> <p>100Mbps Full Run: 450mW</p> <p>1000bp Full Run: 1000mW</p> <p>WoL Enable(S3/S4/S5): 50mW</p> <p>WoL Disable(S3/S4/S5): 25mW</p>
	<p><i>Power Management</i></p>	<p>ACPI compliant – multiple power modes</p> <p>Situation-sensitive features reduce power consumption</p> <p>Advanced link down power saving for reducing link down power consumption</p>
	<p><i>Management Interface</i></p> <p><i>IT Manageability</i></p>	<p>Auto MDI/MDIX Crossover cable detection</p> <p>Wake-on-LAN from standby and hibernation (Magic Packet and Microsoft Wake-Up Frame); Wake-on-LAN from off (Magic Packet only)</p> <p>PXE 2.1 Remote Boot</p> <p>Statistics Gathering (SNMP MIB II, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30))</p> <p>Comprehensive diagnostic and configuration software suite</p> <p>Virtual Cable Doctor for Ethernet cable status</p>
	<p><i>Security & Manageability</i></p>	<p>RTK DASH support with appropriate RTK chipset components</p>

Technical Specifications

Technical Specifications

POWER

<p>AC Adapter 45 Watt nPFC Wall Mount USB type C Straight 1.8 m C6NS</p>	<p>Dimensions Weight Input</p>	<p>62.0 x 62.0 x 28.5 mm unit: 220 g +/- 10 g Input Efficiency</p>	<p>Average Efficiency of 25%, 50%, 75%, 100% load condition with 115Vac/230Vac Spec: 5V: 81.5% 9V: 86.7% 10V: 87.5% 12V: 87.8% 15V: 87.8% 20V: 87.8%</p>
	<p>Output</p>	<p>Input frequency range Input AC current Output power DC output Hold-up time Output current limit</p>	<p>47 ~ 63 Hz Max. 1.4 A at 90 Vac Average Efficiency of 25%, 50%, 75%, 100% load condition with 115Vac/230Vac Spec 5V: 81.5% 9V: 86.7% 10V: 87.5%</p>
	<p>Connector Environmental Design</p>	<p>Non-Standard C6 Operating temperature Non-operating (storage) temperature Altitude Humidity Storage Humidity</p>	<p>32°F to 95°F (0° to 35°C) -4°F to 185°F (-20° to 85°C) 0 to 16,400 ft (0 to 5000m) 20% to 95% 10% to 95%</p>
	<p>EMI and Safety Certifications</p>	<p>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.</p>	

<p>AC Adapter 45 Watt Smart nPFC Standard Barrel 4.5 mm Right Angle 1.8 m</p>	<p>Dimensions Weight Input</p>	<p>95.0 x 40.0 x 26.5 mm unit: 200 g +/- 10 g Input Efficiency</p>	<p>87.74 % at 115 Vac and 88.4 % at 230Vac</p>
	<p>Output</p>	<p>Input frequency range Input AC current Output power DC output Hold-up time Output current limit</p>	<p>47 ~ 63Hz Max. 1.4 A at 90 Vac 45 W 19.5 V 5ms at 115 Vac input <8.0A</p>
	<p>Connector Environmental Design</p>	<p>C6 Operating temperature Non-operating (storage) temperature Altitude Humidity</p>	<p>32°F to 95°F (0° to 35°C) -4°F to 185°F (-20° to 85°C) 0 to 16,400 ft (0 to 5000m) 20% to 95%</p>

Technical Specifications

	<i>Safety Certifications</i>	<i>Storage Humidity</i>	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.		
<hr/>				
<i>AC Adapter 45 Watt Smart nPFC Standard Barrel 4.5 mm Right Angle 1.8 m 2prong</i>	<i>Dimensions</i>	95.0 x 40.0 x 26.5 mm		
	<i>Weight</i>	unit: 200 g +/- 10 g		
	<i>Input</i>	<i>Input Efficiency</i>	87.74 % at 115 Vac and 88.4 % at 230Vac	
		<i>Input frequency range</i>	47 ~ 63 Hz	
		<i>Input AC current</i>	Max. 1.4 A at 90 Vac	
	<i>Output</i>	<i>Output power</i>	45W	
		<i>DC output</i>	19.5V	
		<i>Hold-up time</i>	5ms at 115 Vac input	
		<i>Output current limit</i>	<8.0A	
		<i>Connector</i>	C8	
	<i>Environmental Design</i>	<i>Operating temperature</i>	32° to 95° F (0° to 35° C)	
		<i>Non-operating (storage) temperature</i>	-4° to 185° F (-20° to 85° C)	
		<i>Altitude</i>	0 to 16,400 ft (0 to 5000m)	
		<i>Humidity</i>	20% to 95%	
		<i>Storage Humidity</i>	10% to 95%	
		<i>Safety Certifications</i>	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.		
<hr/>				
<i>AC Adapter 65 Watt nPFC USB type C Straight 1.8 m C6NS</i>	<i>Dimensions</i>	74 x 74 x 28.5 mm		
	<i>Weight</i>	unit: 245 g +/- 10 g		
	<i>Input</i>	<i>Input Efficiency</i>	81.5% min at 115 Vac/ 230Vac @ 5V/3A	
			86.7% min at 115 Vac/ 230Vac @ 9V/3A	
			88% min at 115 Vac/ 230Vac @ 10V/5A	
			88% min at 115 Vac/ 230Vac @ 12V/5A	
			89% min at 115 Vac/ 230Vac @ 15V/4.33A	
			89% min at 115 Vac/ 230Vac @ 20V/3.25A	
	<i>Output</i>	<i>Input frequency range</i>	47 ~ 63 Hz	
		<i>Input AC current</i>	1.7 A at 90 VAC and maximum load	
		<i>Output power</i>	65W	
		<i>DC output</i>	5V/9V/10V/12V/15V/20V	
		<i>Hold-up time</i>	5ms at 115 Vac input	
		<i>Output current limit</i>	<8.0A	
	<i>Connector</i>	Non-Standard C6		
	<i>Environmental Design</i>	<i>Operating temperature</i>	32°F to 95°F (0°to 35°C)	

Technical Specifications

	<i>Non-operating (storage) temperature</i>	-4°F to 185°F (-20° to 85°C)
	<i>Altitude</i>	0 to 16,400 ft (0 to 5000m)
	<i>Humidity</i>	5% to 95%
	<i>Storage Humidity</i>	5% to 95%
<i>Safety Certifications</i>	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 100,000 hours at 25°C ambient condition.	

<i>AC Adapter 65 Watt Smart nPFC EM Barrel 4.5 mm New EM</i>	<i>Dimensions</i>	102 x 55 x 30 mm	
	<i>Weight</i>	unit: 250 g +/- 10 g	
	<i>Input</i>	<i>Input Efficiency</i>	88.0 % at 115 Vac and 89.0 % at 230Vac
		<i>Input frequency range</i>	47 ~ 63 Hz
		<i>Input AC current</i>	Max. 1.7 A at 90 Vac
	<i>Output</i>	<i>Output power</i>	65W
		<i>DC output</i>	19.5V
		<i>Hold-up time</i>	5ms at 115 Vac input
		<i>Output current limit</i>	<11.0A
	<i>Connector</i>	C6	
<i>Environmental Design</i>	<i>Operating temperature</i>	32° F to 95° F (0° to 35° C)	
	<i>Non-operating (storage) temperature</i>	-4° F to 185° F (-20° to 85° C)	
	<i>Altitude</i>	0 to 16,400 ft (0 to 5000m)	
	<i>Humidity</i>	20% to 95%	
<i>Safety Certifications</i>	<i>Storage Humidity</i>	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.		

<i>AC Adapter 65 Watt Smart nPFC Standard Barrel 4.5 mm Right Angle 1.8 m</i>	<i>Dimensions</i>	90.0 x 51 x 28.5 mm	
	<i>Weight</i>	unit: 230 g +/- 10 g	
	<i>Input</i>	<i>Input Efficiency</i>	88.0 % at 115 Vac and 89.0 % at 230Vac
		<i>Input frequency range</i>	47 ~ 63 Hz
		<i>Input AC current</i>	Max. 1.7 A at 90 Vac
	<i>Output</i>	<i>Output power</i>	65W
		<i>DC output</i>	19.5V
		<i>Hold-up time</i>	5ms at 115 Vac input
		<i>Output current limit</i>	<11.0A
	<i>Connector</i>	C6	
<i>Environmental Design</i>	<i>Operating temperature</i>	32° F to 95° F (0° to 35° C)	

Technical Specifications

Non-operating (storage) temperature **-4° F to 185° F (-20° to 85° C)**

Altitude **0 to 16,400 ft (0 to 5000m)**

Humidity **20% to 95%**

Storage Humidity **10% to 95%**

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.

Battery SS 3 Cell 50 WHr Long Life -PL

Dimensions

L 278.7 mm x W 76.3 mm x H 7.1 mm

Weight

193 g +/- 10 g

Cells/Type

3cell Lithium-Ion Polymer cell / P604883A1

Voltage **11.55 V**

Energy

Amp-hour capacity **4.113 Ah/ 4.330 Ah**

Watt-hour capacity **50 Wh**

Temperature

Operating (Charging) **0° to 50° C**

Operating (Discharging) **-10° to 60° C**

Warranty

Based on system offering

Optional Travel Battery Available

No

COUNTRY OF ORIGIN

China

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

Type	Description	Part #
Cases	HP Essential Top Load Case (up to 15.6")	H2W17AA
	HP Slim Ultrabook Top Load	F3W15AA
	HP Basic/Essential Backpack	H1D24AA
	HP Exec Midnight 15.6" Backpack	1KM16AA
Docking	HP UltraSlim Docking Station	D9Y32AA
	HP Thunderbolt Dock 120W G2	2UK37AA
	HP TB Dock Audio Module	3AQ21AA
	HP TB Dock 120W G2 cable	3XB94AA
	HP TB Dock G2 combo cable	3XB96AA
	HP USB-C Dock G4	3FF69AA
	HP USB-C Mini Dock	1PM64AA
	HP USB Travel Dock	TOK30AA
	HP USB-C Universal Dock	1MK33AA
	HP USB-C Universal Dock w/4.5mm Adapter	2UF95AA
	HP USB-C Universal Dock w/4.5mm Adapter - non-flash version	3DV65AA
	HP USB-C Dock G5	5TW10AA
	HP USB-C/A Universal Dock G2	5TW13AA
	HP Adjustable Dual Display Stand	AW664AA
HP Display and Notebook Stand II	E8G00AA	
Input/Output	HP Slim Wireless Keyboard and Mouse	T6L04AA
	HP Slim USB Keyboard and Mouse	T6T83AA
	HP Wireless (Link-5) Keyboard	T6U20AA
	HP USB Essential Keyboard and Mouse	H6L29AA
	HP Conferencing Keyboard	K8P74AA
	HP USB Collaboration Keyboard	Z9N38AA
	HP Wireless Collaboration Keyboard	Z9N39AA
	HP Comfort Grip Wireless Mouse	H2L63AA
	HP X4000b Bluetooth Mouse	H3T50AA
	HP 3-Button USB Laser Mouse	H4B81AA
	HP USB Travel Mouse	G1K28AA
	HP Ultra Mobile Wireless Mouse	H6F25AA
	HP Slim Bluetooth Mouse to AMO	F3J92AA
	HP Wireless Premium Mouse	1JR31AA
	HP USB Premium Mouse	1JR32AA
	HP Essential USB Mouse	2TX37AA
	HP Elite Presenter Mouse	2CE30AA
	HP Stereo 3.5mm Headset	T1A66AA
	HP Stereo USB Headset	T1A67AA
	HP UC Wireless Mono Headset	W3K08AA
HP UC Wireless Duo Headset	W3K09AA	

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

	HP USB-C to USB 3.0 Adapter	N2Z63AAA
	HP USB-C to USB-A Hub	Z6A00AA
	HP USB-C to DP	N9K78AA
	HP USB-C to VGA	N9K76AA
	HP HDMI to DVI	F5A28AA
	HP HDMI to VGA	H4F02AA
	HP USB-C to HDMI 2.0 Adapter	1WC36AA
<i>Power</i>	HP 65W Slim AC Adapter	H6Y82AA
	HP 90W Slim AC Adapter	H6Y83AA
	HP 90W Slim Combo AC Adapter w/ USB	H6Y84AA
	HP 45W Smart AC Adapter	H6Y88AA
	HP 65W Smart AC Adapter	H6Y89AA
	HP 90W Smart AC Adapter	H6Y90AA
	HP 45W 2-prong 4.5 mm DC jack AC Adapter	L6F60AA
	HP 45W USB-C Power Adapter	1HE07AA
	HP 65W USB-C Power Adapter	1HE08AA
	65W USB-C Slim Power Adapter	3PN48AA
	HP Notebook Power Bank	N9F71AA
	HP USB-C Notebook Power Bank	1TZ86AA
<i>Memory</i>	HP 4GB 2400MHz DDR4 Memory	Z4Y84AA
	HP 8GB 2400MHz DDR4 Memory	Z4Y85AA
	HP 16GB 2400MHz DDR4 Memory	Z4Y86AA
<i>Storage</i>	HP USB External DVDRW Drive	F2B56AA
	HP 256GB M2 PCIe NVME SSD TLC (2280)	1FU87AA
	HP 512GB M2 PCIe NVME SSD TLC (2280)	1FU88AA
<i>Security</i>	HP Docking Station Cable Lock	AU656AA
	HP Essential Combination Lock	T0Y16AA
	HP Combination Lock	T0Y15AA
	HP Keyed Cable lock	T0Y14AA
	HP Keyed Cable Lock 10mm	T1A62AA
	HP Dual Head Keyed Cable Lock	T1A64AA

Summary of Changes

Change Log

<i>Date of change:</i>	<i>Version History:</i>		<i>Description of change:</i>
June 25, 2019	V1 to V2	Updated	Color Gamut
June 27, 2019	V2 to V3	Updated	Battery Life and Display Section
July 12, 2019	V3 to V4	Added	Environmental Section
September 6, 2019	V4 to V5	Updated	Nano lock slot, Storage Section and Brightness disclaimer for 1000nits
October 8, 2019	V5 to V6	Added	Enable AMD Memory in at a glance section
May 27, 2020	V6 to V7	Updated	Ports section

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