

### Overview

#### HP EliteBook 735 G6 Notebook PC



#### Left

- |                                    |   |
|------------------------------------|---|
| 1. HD and IR Camera (Optional)     | 7. Clickpad                                   |
| 2. Ambient Light Sensor (Optional) | 8. Smartcard Reader (Optional)                |
| 3. IR Camera LEDs (Optional)       | 9. USB 3.1 Gen 1 Charging Port                |
| 4. Internal Microphones            | 10. Vents                                     |
| 5. HP Privacy Camera Shutter       | 11. Security Lock Slot (Lock sold separately) |
| 6. HD Camera LED                   | 12. Power Button                              |

### Overview



#### Right

- |                                   |  |
|-----------------------------------|--|
| 1. Power Connector                | 6. USB 3.1 Gen 1 port                  |
| 2. USB Type-C™                    | 7. Audio Combo Jack                    |
| 3. Docking Connector              | 8. SIM Card Slot¹                      |
| 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<sup>1</sup>
- 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 cd/m<sup>2</sup>, 45% NTSC  
33.8 cm (13.3") diagonal FHD IPS anti-glare LED-backlit non-touch 400 cd/m<sup>2</sup>, 72% NTSC  
33.8cm (13.3") diagonal FHD IPS anti-glare LED-backlit non-touch, 1000 cd/m<sup>2</sup>, 72% NTSC with HP Sure View  
33.8cm (13.3") diagonal FHD Anti-Glare On-Cell LED-backlit touch, 250 cd/m<sup>2</sup>, 45% NTSC
- Enterprise grade security with HP SureStart, HP Privacy Camera<sup>1</sup>, HP Sure View<sup>4</sup>, HP Sure Run, HP Sure Recover, HP Sure Click, HP Sure Sense<sup>5</sup>, SmartCard Reader<sup>1</sup> and Touch Fingerprint reader<sup>1</sup>
- Preinstalled with Windows 10 versions or FreeDOS
- Supports fast charging (50% in 30 minutes) with no impact on battery recharge cycles<sup>2</sup>
- Flexible wireless connectivity options
- Passed MIL-STD 810G tests<sup>3</sup>
- Battery Life up to 15 hours and 15 minutes (2<sup>nd</sup> 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.

**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 64<sup>1</sup>  
Windows 10 Pro 64 (National Academic License)<sup>2</sup>  
Windows 10 Home 64<sup>1</sup>  
Windows 10 Home Single Language 64<sup>1</sup>  
Windows 10 Pro (Windows 10 Enterprise available with a Volume Licensing Agreement)<sup>1</sup>  
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)<sup>3,4,5</sup>

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)<sup>3,4,5</sup>

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)<sup>3,4,5</sup>

##### Processor Family

2nd Gen AMD® Ryzen™ PRO APU processor<sup>5</sup>

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 Graphics<sup>6</sup>

##### 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)<sup>6,8,9</sup>

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

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)<sup>6,8,9</sup>

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

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)<sup>6,8,9</sup>

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)<sup>6,8,9</sup>

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)<sup>6,8,9</sup>

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)<sup>6,8,9</sup>

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)<sup>6,7,8,9</sup>

##### 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)<sup>6,8,9</sup>

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)<sup>6,8,9</sup>

##### 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.

### Features

Docking station model	Total number of supported displays (incl. the notebook display)	Max.resolutions supported	Dock Connectors	Technical limitations
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 TLC<sup>10</sup>  
 256 GB PCIe® NVMe™ Value SS TLC<sup>10</sup>  
 256 GB PCIe® Gen3x4 NVMe™ SS TLC<sup>10</sup>  
 256 GB SATA-3 TLC Opal 2<sup>10</sup>  
 512 GB PCIe® Gen3x4 NVMe™ SS TLC<sup>10</sup>  
 512 GB PCIe® Gen3x4 NVMe™ SS TLC Opal 2<sup>10</sup>  
 512 GB PCIe® Value<sup>10</sup>  
 1 TB PCIe® Gen3 x4 NVMe™ SS TLC<sup>10</sup>

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)<sup>11</sup>  
 16 GB DDR4-2400 SDRAM (1 x 16 GB)<sup>11</sup>  
 16 GB DDR4-2400 SDRAM (2 x 8 GB)<sup>11</sup>  
 8 GB DDR4-2400 SDRAM (1 x 8 GB)<sup>11</sup>  
 8 GB DDR4-2400 SDRAM (2 x 4 GB)<sup>11</sup>  
 4 GB DDR4-2400 SDRAM (1 x 4 GB)<sup>11</sup>

#### Memory Slots

2 SODIMM

### Features

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 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 Combo, non-vPro™<sup>12</sup>  
Intel® AX200 Wi-Fi 6<sup>16</sup> (2x2) and Bluetooth® 5 Combo, non-vPro™ (supporting gigabit file transfer speeds)  
Realtek RTL8822BE 802.11ac (2x2) and Bluetooth® 4.2 Combo<sup>12</sup>

#### WWAN

Intel® XMM™ 7360 LTE-Advanced Cat 9<sup>13</sup>

#### NFC

NXP NPC300 Near Field Communication Module

#### Miracast

Native Miracast Support<sup>14</sup>

#### Ethernet

Realtek PCIe GbE Family Controller 10/100/1000<sup>15</sup>

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

#### Camera

720p HD camera<sup>6,9</sup>  
720p HD+IR camera<sup>6,9,17</sup>

#### Sensors



### Features

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 Gen5<sup>18</sup>  
HP Drive Lock & Automatic Drive Lock<sup>19</sup>  
BIOS Update via Network  
Master Boot Record Security  
Power On Authentication  
Secure Erase<sup>20</sup>  
Absolute Persistence Module<sup>21</sup>  
Pre-boot Authentication

###### Software

HP Native Miracast Support<sup>22</sup>  
HP Connection Optimizer  
HP Image Assistant  
HP Hotkey Support  
HP JumpStart  
HP Support Assistant<sup>23</sup>  
HP Noise Cancellation Software  
Buy Office (Sold separately)

##### Manageability Features

HP Driver Packs<sup>24</sup>  
HP System Software Manager (SSM)  
HP BIOS Config Utility (BCU)  
HP Client Catalog  
HP Manageability Integration Kit Gen3<sup>25</sup>  
HP Cloud Recovery<sup>26</sup>

##### Client Security Software

HP Client Security Manager Gen5<sup>27</sup>  
HP Fingerprint Sensor<sup>28</sup>  
HP Power On Authentication  
Windows Defender<sup>29</sup>

##### Security Management

Pre-boot Authentication  
TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified)<sup>30</sup>  
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 Click<sup>31</sup>

HP Sure Start For AMD<sup>32</sup>

Sure Run Gen2<sup>33</sup>

Sure Recover Gen2<sup>34</sup>

Sure Sense<sup>35</sup>

#### 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 adapter<sup>36</sup>  
HP Smart 45 W External AC power adapter, 2-prong (Japan only)<sup>36</sup>  
HP Smart 65 W External AC power adapter<sup>36</sup>  
HP Smart 65 W EM External AC power adapter<sup>36</sup>  
45 W USB Type-C™ adapter<sup>36</sup>  
65 W USB Type-C™ adapter<sup>36</sup>

##### Primary Battery

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

##### Battery Life

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

##### Power Cord

2-wire plug - 1.0m<sup>36</sup>  
3-wire plug - 1.0m<sup>36</sup>  
3-wire plug - 1.8m<sup>36</sup>  
Duckhead power cord - 1.0m<sup>36</sup>  
Duckhead power cord - 1.8m<sup>36</sup>

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)<sup>40</sup>  
Starting at 1.33 kg (non-touch); Starting at 1.44 kg (touch)<sup>40</sup>

##### 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

#### PORTS/SLOTS

##### Ports

- 1 USB Type-C™ (Alt Mode)
- 2 USB 3.1 Gen 1 (1 charging)
- 1 HDMI 2.0<sup>41</sup>
- 1 RJ-45 / Ethernet
- 1 Docking connector
- 1 Headphone/microphone combo
- 1 AC power
- 1 SIM card slot<sup>42</sup>
- 1 Smartcard reader<sup>42</sup>

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>.<sup>43</sup>

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.

---

### Technical Specifications

#### SYSTEM UNIT

<b>Stand-Alone Power Requirements (AC Power)</b>	<b>Nominal Operating Voltage</b>	19V
	<b>Average Operating Power</b>	Win 10
	<b>Integrated Graphics</b>	AMD has no this data (APU is 15 W)
<b>Temperature</b>	<b>Max Operating Power</b>	UMA <45 W
	<b>Operating</b>	32° to 95° F (0° to 35° C)
	<b>Non-operating</b>	-4° to 140° F (-20° to 60° C)
<b>Relative Humidity</b>	<b>Operating</b>	10% to 90%, non-condensing
	<b>Non-operating</b>	5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature
<b>Shock</b>	<b>Operating</b>	40 G, 2 ms, half-sine
	<b>Non-operating</b>	200 G, 2 ms, half-sine
<b>Random Vibration</b>	<b>Operating</b>	0.75 grms
	<b>Non-operating</b>	1.50 grms
<b>Altitude (unpressurized)</b>	<b>Operating</b>	-50 to 10,000 ft (-15.24 to 3,048 m)
	<b>Non-operating</b>	-50 to 40,000 ft (-15.24 to 12,192 m)
<b>Planned Industry Standard Certifications</b>	<b>UL</b>	Yes
	<b>CSA</b>	Yes
	<b>FCC Compliance</b>	Yes
	<b>ENERGY STAR®</b>	Yes, Select models <sup>44</sup>
	<b>EPEAT® 2019</b>	Yes, Silver in U.S. <sup>45</sup>
	<b>Australia / NZ A-Tick Compliance</b>	Yes
	<b>CCC</b>	Yes
	<b>Japan VCCI Compliance</b>	Yes
	<b>KC</b>	Yes
	<b>BSMI</b>	Yes
	<b>CE Marking Compliance</b>	Yes
	<b>GOST</b>	Yes
	<b>Saudi Arabian Compliance (ICCP)</b>	Yes
	<b>UKRSERTCOMPUTER</b>	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

**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**

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

**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**

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



### Technical Specifications

**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**

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

**Panel LCD 13.3 inch FHD  
(1920 x 1080) Anti-Glare WLED  
UWVA 72percent cg 1000nits  
eDP 1.4+PSR2 flat Privacy  
NWBZ\***

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

### Technical Specifications

#### STORAGE

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

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

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

### Technical Specifications

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

### Technical Specifications

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

#### SSD 512 GB 2280 PCIe NVMe Value

<b>Form Factor</b>	M.2 2280
<b>Capacity</b>	512 GB
<b>NAND Type</b>	TLC/QLC
<b>Height</b>	0.09 in (2.3 mm)
<b>Width</b>	0.87 in (22 mm)
<b>Weight</b>	0.02 lb (10 g)
<b>Interface</b>	PCIe NVMe Gen3X4
<b>Maximum Sequential Read</b>	Around 1500 ~ 1700 MB/s
<b>Maximum Sequential Write</b>	Around 860 ~ 1500 MB/s
<b>Logical Blocks</b>	1000215215
<b>Operating Temperature</b>	32° to 158°F (0° to 70°C) [ambient temp]
<b>Features</b>	ATA Security; TRIM; L1.2

#### SSD 512 GB 2280 PCIe-3x4 NVMe Self Encrypted OPAL2 Three Layer Cell

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

### Technical Specifications

#### NETWORKING/COMMUNICATIONS

<b>Intel® 9260</b> <b>802.11a/b/g/n/ac (2 x 2)</b> <b>Wi-Fi® and Bluetooth®</b> <b>5.0 Combo<sup>1</sup> Non-vPro</b>	<b>Wireless LAN Standards</b>	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
	<b>Interoperability</b>	Wi-Fi® certified
	<b>Frequency Band</b>	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
	<b>Data Rates</b>	• 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)
	<b>Modulation</b>	Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM
	<b>Security<sup>3</sup></b>	• 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
	<b>Network Architecture Models</b>	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	<b>Roaming</b>	IEEE 802.11 compliant roaming between access points
	<b>Output Power<sup>2</sup></b>	• 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

### Technical Specifications

	<ul style="list-style-type: none"> <li>• 802.11n HT40(5GHz): +14.5dBm minimum</li> <li>• 802.11ac VHT80(5GHz): +11.5dBm minimum</li> <li>• 802.11ac VHT160(5GHz): +11.5dBm minimum</li> </ul>	
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>• Transmit mode 2.0 W</li> <li>• Receive mode 1.6 W</li> <li>• Idle mode (PSP) 180 mW (WLAN Associated)</li> <li>• Idle mode 50 mW (WLAN unassociated)</li> <li>• Connected Standby/Modern 10mW</li> <li>• Radio disabled 8 mW</li> </ul>	
<b>Power Management</b>	ACPI compliant power management 802.11 compliant power saving mode	
<b>Receiver Sensitivity<sup>4</sup></b>	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	
<b>Antenna type</b>	High efficiency antenna with spatial diversity, mounted in the display enclosure	
	Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications	
<b>Form Factor</b>	PCI-Express M.2 MiniCard	
<b>Dimensions</b>	1. Type 2230: 2.3 x 22.0 x 30.0 mm 2. Type 1216: 1.67 x 12.0 x 16.0 mm	
<b>Weight</b>	1. Type 2230: 2.8g 2. Type 126: 1.3g	
<b>Operating Voltage</b>	3.3v +/- 9%	
<b>Temperature</b>	<b>Operating</b>	14° to 158° F (–10° to 70° C)
	<b>Non-operating</b>	–40° to 176° F (–40° to 80° C)
<b>Humidity</b>	<b>Operating</b>	10% to 90% (non-condensing)
	<b>Non-operating</b>	5% to 95% (non-condensing)
<b>Altitude</b>	<b>Operating</b>	0 to 10,000 ft (3,048 m)
	<b>Non-operating</b>	0 to 50,000 ft (15,240 m)
<b>LED Activity</b>	<b>LED Amber</b>	Radio OFF
	<b>LED OFF</b>	Radio ON

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

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

### Technical Specifications

<b>Signaling Data Rate</b>	<p>Legacy: 3 Mbps signaling data rate<sup>1</sup> 2.17 Mbps  BLE: 1 Mbps signaling data rate<sup>1</sup> 0.2 Mbps  1. Actual throughput may vary.</p> <p>Legacy: Synchronous Connection Oriented links up to 3, 64 kbps, voice channels</p> <p>Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)</p>
<b>Transmit Power</b>	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 4 dBm for BR and EDR.
<b>Power Consumption</b>	<p>Peak (Tx) 330 mW  Peak (Rx) 230 mW  Selective Suspend 17 mW</p>
<b>Electrical Interface</b>	USB 2.0 compliant
<b>Bluetooth Software Supported</b>	Microsoft Windows Bluetooth Software
<b>Power Management</b>	Microsoft Windows ACPI, and USB Bus Support
<b>Certifications</b>	FCC (47 CFR) Part 15C, Section 15.247 & 15.249
<b>Power Management Certifications</b>	<p>ETS 300 328, ETS 300 826  Low Voltage Directive IEC950  UL, CSA, and CE Mark</p>
<b>Bluetooth Profiles Supported</b>	<p>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 &amp; 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)</p>

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

#### 802.11a/b/g/n/ac (2 x 2) Wireless LAN Standards Wi-Fi® and Bluetooth® 4.2 Combo<sup>1</sup>

##### Interoperability

##### Frequency Band

##### Data Rates

##### Modulation

##### Security<sup>3</sup>

##### Network Architecture

##### Models

##### Roaming

##### Output Power<sup>2</sup>

##### Power Consumption

- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n
- IEEE 802.11ac
- Wi-Fi® certified
- 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
- 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)
- Direct Sequence Spread Spectrum
- BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM
- 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
- Ad-hoc (Peer to Peer)
- Infrastructure (Access Point Required)
- IEEE 802.11 compliant roaming between access points
- 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
- Transmit mode 2.0 W
- Receive mode 1.6 W
- Idle mode (PSP) 180 mW (WLAN Associated)
- Idle mode 50 mW (WLAN unassociated)

### Technical Specifications

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

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

<b>Bluetooth Specification</b>	4.0/4.1/4.2 Compliant
<b>Frequency Band</b>	2402 to 2480 MHz
<b>Number of Available Channels</b>	Legacy: 0~79 (1 MHz/CH) BLE: 0~39 (2 MHz/CH)
<b>Signaling Data Rate</b>	Legacy: 3 Mbps signaling data rate <sup>1</sup> 2.17 Mbps BLE: 1 Mbps signaling data rate <sup>1</sup> 0.2 Mbps <a href="#">1. Actual throughput may vary.</a>

Legacy: Synchronous Connection Oriented links up to 3, 64 kbps, voice channels

### Technical Specifications

Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)

<b>Transmit Power</b>	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 4 dBm for BR and EDR.
<b>Power Consumption</b>	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW
<b>Electrical Interface</b>	USB 2.0 compliant
<b>Bluetooth Software Supported</b>	Microsoft Windows Bluetooth Software
<b>Power Management</b>	Microsoft Windows ACPI, and USB Bus Support
<b>Certifications</b>	FCC (47 CFR) Part 15C, Section 15.247 & 15.249
<b>Power Management Certifications</b>	ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark
<b>Bluetooth Profiles Supported</b>	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

<b>Intel® Wi-Fi® 6<sup>5</sup> AX200 + BT5 (802.11ax 2 x 2, non-vPro, supporting gigabit file transfer speeds) non-vPro</b>	<b>Wireless LAN Standards</b>	<ul style="list-style-type: none"> <li>IEEE 802.11a</li> <li>IEEE 802.11b</li> <li>IEEE 802.11g</li> <li>IEEE 802.11n</li> <li>IEEE 802.11ac</li> <li>IEEE 802.11ax</li> <li>IEEE 802.11d</li> <li>IEEE 802.11e</li> <li>IEEE 802.11h</li> <li>IEEE 802.11i</li> <li>IEEE 802.11k</li> <li>IEEE 802.11r</li> <li>IEEE 802.11v</li> </ul>
	<b>Interoperability</b>	Wi-Fi® certified
	<b>Frequency Band</b>	<ul style="list-style-type: none"> <li>802.11b/g/n/ax <ul style="list-style-type: none"> <li>• 2.402 – 2.482 GHz</li> </ul> </li> <li>802.11a/n/ac/ax <ul style="list-style-type: none"> <li>• 4.9 – 4.95 GHz (Japan)</li> <li>• 5.15 – 5.25 GHz</li> <li>• 5.25 – 5.35 GHz</li> <li>• 5.47 – 5.725 GHz</li> <li>• 5.825 – 5.850 GHz</li> </ul> </li> </ul>
	<b>Data Rates</b>	<ul style="list-style-type: none"> <li>•802.11b: 1, 2, 5.5, 11 Mbps</li> <li>•802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps</li> <li>•802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps</li> <li>•802.11n: MCS 0 ~ MCS 15, (20MHz, and 40MHz)</li> <li>•802.11ac: MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, 80MHz &amp; 160MHz)</li> <li>• 802.11ax: MCS0 ~ MCS11, (1SS and 2SS) (20MHz, 40MHz, 80MHz &amp; 160MHz)</li> </ul>
	<b>Modulation</b>	Direct Sequence Spread Spectrum OFDM, BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024QAM
	<b>Security<sup>3</sup></b>	<ul style="list-style-type: none"> <li>•IEEE and Wi-Fi compliant 64 / 128 bit WEP encryption for a/b/g mode only</li> <li>•AES-CCMP: 128 bit in hardware</li> <li>•802.1x authentication</li> <li>•WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES.</li> <li>•WPA2 certification</li> <li>•IEEE 802.11i</li> <li>•WAPI</li> </ul>
	<b>Network Architecture Models</b>	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	<b>Roaming</b>	IEEE 802.11 compliant roaming between access points
	<b>Output Power<sup>2</sup></b>	<ul style="list-style-type: none"> <li>• 802.11b: +18.5dBm minimum</li> <li>• 802.11g: +17.5dBm minimum</li> <li>• 802.11a: +18.5dBm minimum</li> <li>• 802.11n HT20(2.4GHz): +15.5dBm minimum</li> </ul>

### Technical Specifications

	<ul style="list-style-type: none"> <li>• 802.11n HT40(2.4GHz): +14.5dBm minimum</li> <li>• 802.11n HT20(5GHz): +15.5dBm minimum</li> <li>• 802.11n HT40(5GHz): +14.5dBm minimum</li> <li>• 802.11ac VHT80(5GHz): +11.5dBm minimum</li> <li>• 802.11ac VHT160(5GHz): +11.5dBm minimum</li> <li>• 802.11ax HT40(2.4GHz): +10dBm minimum</li> <li>• 802.11ax VHT160(5GHz): +10dBm minimum</li> </ul>	
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>• Transmit mode 2.0 W</li> <li>• Receive mode 1.6 W</li> <li>• Idle mode (PSP) 180 mW (WLAN Associated)</li> <li>• Idle mode 50 mW (WLAN unassociated)</li> <li>• Connected Standby 10mW</li> <li>• Radio disabled 8 mW</li> </ul>	
<b>Power Management</b>	ACPI and PCI Express compliant power management 802.11 compliant power saving mode	
<b>Receiver Sensitivity<sup>3</sup></b>	<ul style="list-style-type: none"> <li>• 802.11b, 1Mbps: -93.5dBm maximum</li> <li>• 802.11b, 11Mbps: -84dBm maximum</li> <li>• 802.11a/g, 6Mbps: -86dBm maximum</li> <li>• 802.11a/g, 54Mbps: -72dBm maximum</li> <li>• 802.11n, MCS07: -67dBm maximum</li> <li>• 802.11n, MCS15: -64dBm maximum</li> <li>• 802.11ac, MCS0: -84dBm maximum</li> <li>• 802.11ac, MCS9: -59dBm maximum</li> <li>• 802.11ax, MCS11(HT40): -59dBm maximum</li> <li>• 802.11ax, MCS11(VHT160): -58.5dBm maximum</li> </ul>	
<b>Antenna type</b>	<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>	
<b>Form Factor</b>	PCI-Express M.2 MiniCard	
<b>Dimensions</b>	<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>	
<b>Weight</b>	<p>1. Type 2230: 2.8g</p> <p>2. Type 126: 1.3g</p>	
<b>Operating Voltage</b>	3.3v +/- 9%	
<b>Temperature</b>	<b>Operating</b>	14° to 158° F (–10° to 70° C)
	<b>Non-operating</b>	–40° to 176° F (–40° to 80° C)
<b>Humidity</b>	<b>Operating</b>	10% to 90% (non-condensing)
	<b>Non-operating</b>	5% to 95% (non-condensing)
<b>Altitude</b>	<b>Operating</b>	0 to 10,000 ft (3,048 m)
	<b>Non-operating</b>	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

### Technical Specifications

<b>Bluetooth Specification</b>	4.0/4.1/4.2/5.0/5.1 Compliant
<b>Frequency Band</b>	2402 to 2480 MHz
<b>Number of Available Channels</b>	Legacy: 0~79 (1 MHz/CH) BLE: 0~39 (2 MHz/CH)
<b>Signaling Data Rate</b>	Legacy: 3 Mbps signaling data rate <sup>1</sup> 2.17 Mbps BLE: 1 Mbps signaling data rate <sup>1</sup> 0.2 Mbps <a href="#">1. Actual throughput may vary.</a>
	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)
<b>Transmit Power</b>	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 9.5 dBm for BR and EDR.
<b>Power Consumption</b>	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW
<b>Bluetooth Software Supported</b>	Microsoft Windows Bluetooth Software
<b>Power Management</b>	Microsoft Windows ACPI, and USB Bus Support
<b>Certifications</b>	FCC (47 CFR) Part 15C, Section 15.247 & 15.249
<b>Power Management Certifications</b>	ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark
<b>Bluetooth Profiles Supported</b>	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.

### Technical Specifications

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.

<b>Intel® XMM™ 7360 LTE-Advanced CAT9<sup>1</sup></b>	<b>Technology/Operating bands</b>	FDD LTE: 2100 (Band 1), 1900 (Band 2), 1800 (Band 3), 1700/2100 (Band 4), 850 (Band 5), 2600 (Band 7), 900 (Band 8), 1400 (Band 11), 700 (Band 12 lower), 700 (Band 13 upper), 700 (Band 17 lower), 850 (Band 18 lower), 850 (Band 19 upper), 800 (Band 20), 1400 (Band 21), 850 (Band 26), 700 (Band 28), 700 (Band 29 RX only), 2300 (Band 30), 1700/2100 (Band 66). TDD LTE: 2600 (Band 38), 1900 (Band 39), 2400 (Band 40), 2500 (Band 41). HSPA+: 2100 (Band 1), 1900 (Band 2), 1700/2100 (Band 4), 850 (Band 5), 900 (Band 8) MHz
	<b>Wireless protocol standards</b>	3GPP Release 11 LTE Specification CAT.9, DL 60MHz BW throughput up to 450Mbps; UL 20MHz throughput up to 50Mbps WCDMA R99, 3GPP Release 5, 6, 7 and 8 UMTS Specification
	<b>GPS</b>	Standalone, A-GPS (MS-A, MS-B)
	<b>GPS bands</b>	1575.42 MHz ± 1.023 MHz, GLONASS 1596-1607MHz, Beidou 1561.098 MHz
	<b>Maximum data rates</b>	LTE: 450 Mbps (Download), 50 Mbps (Upload) DC-HSPA+: 42 Mbps (Download), 5.76 Mbps (Upload) HSPA+: 21Mbps (Download), 5.76 Mbps (Upload)
	<b>Maximum output power</b>	LTE: 23 dBm HSPA+: 23.5 dBm
	<b>Maximum power consumption</b>	LTE: 1,200 mA (peak); 900 mA (average) HSPA+: 1,100 mA (peak); 800 mA (average)
	<b>Form Factor</b>	M.2, 3042-S3 Key B
	<b>Weight</b>	5.8 g
	<b>Dimensions (Length x Width x Thickness)</b>	42 x 30 x 2.3 mm

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



### Technical Specifications

<b>Near Field Communications Controller (optional)</b>	<b>Dimensions (L x W x H)</b>	Module 25 mm by 10 mm by 2.0 mm
	<b>Chipset</b>	NPC300
	<b>System interface</b>	I2C
	<b>NFC RF standards</b>	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
	<b>NFC Forum Support</b>	Tag Type 1, Type 2, Type3 and Type 4, NFCIP-1 and NFCIP-2
	<b>Reader (PCD-VCD) Mode(1)</b>	ISO/IEC 14443 A
		ISO/IEC 14443 B
		ISO/IEC 15693
		MIFARE 1K
		MIFARE 4K
	<b>Card Emulation (PICC-VICC) Mode(1)</b>	MIFARE DESFire
		FeliCa
		Jewel and Topaz cards
		ISO/IEC 14443 A
		ISO/IEC 14443 B and B'
		MIFARE
		FeliCa
	<b>Frequency</b>	13.56 MHz
<b>Power Consumption (Booster enable, VBAT= 3.3V, VCC_BOOST = 5V)</b>	<b>NFC Modes Supported</b>	Reader/Writer, Peer-to-Peer
	<b>Raw RF Data Rates</b>	106, 212, 424, 848 kbps
	<b>Operating temperature</b>	0°C to 70°C
	<b>Storage temperature</b>	-20°C to 125°C
	<b>Humidity</b>	10-90% operating
		5-95% non-operating
	<b>Supply Operating voltage</b>	4.35 to 5.25 Volts
	<b>I/O Voltage</b>	1.8V or 3.3V
	<b>Mode</b>	Power Consumption, Typical
	<b>Polling</b>	710.93 mW
	<b>Detected Test Tag Type 1</b>	152.09 mW
	<b>Detected Test Tag Type 2</b>	341.26 mW
	<b>Detected Test Tag Type 3</b>	383.76 mW
	<b>Detected Test Tag Type 4</b>	312.26 mW
	<b>Antenna</b>	Antenna connector, 0.5mm pitch, 7 connector FPC. Antenna matching is external to module.

### Technical Specifications

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

## POWER

AC Adapter 45 Watt nPFC Wall Mount USB type C Straight 1.8 m C6NS	Dimensions	62.0 x 62.0 x 28.5 mm			
	Weight	unit: 220 g +/- 10 g			
	Input	Input Efficiency	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%		
		Input frequency range	47 ~ 63 Hz		
		Input AC current	Max. 1.4 A at 90 Vac		
		Output	Output power	Average Efficiency of 25%, 50%, 75%, 100% load condition with 115Vac/230Vac Spec	
			DC output	5V: 81.5%	
			Hold-up time	9V: 86.7%	
			Output current limit	10V: 87.5%	
		Connector	Non-Standard C6		
		Environmental Design	Operating temperature	32°F to 95°F (0° to 35°C)	
			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%		
	EMI and Safety Certifications	CE Mark - full compliance with LVD and EMC directives Worldwide safety standards - IEC60950, EN60950, UL60950, Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE. MTBF - over 200,000 hours at 25°C ambient condition.			

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

### Technical Specifications

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

### Technical Specifications

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

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

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

### Technical Specifications

<b>Safety Certifications</b>	<b>Non-operating (storage) temperature</b>	-4° F to 185° F (-20° to 85° C)
	<b>Altitude</b>	0 to 16,400 ft (0 to 5000m)
	<b>Humidity</b>	20% to 95%
	<b>Storage Humidity</b>	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.	

<b>Battery SS 3 Cell 50 WHr Long Life -PL</b>	<b>Dimensions</b>	L 278.7 mm x W 76.3 mm x H 7.1 mm
	<b>Weight</b>	193 g +/- 10 g
	<b>Cells/Type</b>	3cell Lithium-Ion Polymer cell / P604883A1
	<b>Voltage</b>	11.55 V
	<b>Energy</b>	
	<b>Amp-hour capacity</b>	4.113 Ah/ 4.330 Ah
	<b>Watt-hour capacity</b>	50 Wh
	<b>Temperature</b>	
	<b>Operating (Charging)</b>	0° to 50° C
	<b>Operating (Discharging)</b>	-10° to 60° C
<b>Warranty</b>	Based on system offering	
	<b>Optional Travel Battery Available</b>	No

### COUNTRY OF ORIGIN

China

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

Type	Description	Part #
<b>Cases</b>	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
<b>Docking</b>	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
<b>Input/Output</b>	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
<b>Power</b>	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
<b>Memory</b>	HP 4GB 2400MHz DDR4 Memory	Z4Y84AA
	HP 8GB 2400MHz DDR4 Memory	Z4Y85AA
	HP 16GB 2400MHz DDR4 Memory	Z4Y86AA
<b>Storage</b>	HP USB External DVDRW Drive	F2B56AA
	HP 256GB M2 PCIe NVME SSD TLC (2280)	1FU87AA
	HP 512GB M2 PCIe NVME SSD TLC (2280)	1FU88AA
<b>Security</b>	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

Date of change:	Version History:		Description of change:
June 25, 2019	V1 to V2	Updated	Color Gamut
June 27, 2019	V2 to V3	Updated	Battery Life and Display Section

Copyright © 2019 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel®, Core®, Celeron® and Intel vPro are trademarks or registered trademarks of Intel® Corporation or its subsidiaries in the United States and other countries. AMD and Radeon are trademarks of Advanced Micro Devices, Inc. NVIDIA, the NVIDIA logo, and [insert any other Nvidia marks used by agreement] are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. USB Type-C™ and USB-C™ are trademarks of USB Implementers Forum. SDXC is a registered trademark of SD-3C in the United States, other countries or both. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency.