Overview

HP EliteBook 850 G7 Notebook PC



Left

- 1. Ambient Light Sensor (Optional)
- 2. Internal Microphones
- 3. Webcam LED (Optional)
- 4. Camera Shutter
- 5. HD and IR Camera (Optional)
- 6. IR Camera LEDs (Optional)

- 7. Numeric keypad
- 8. Glass Clickpad
- 9. Smartcard Reader (Optional)
- 10. Audio Combo Jack
- 11. USB 3.1 Gen 1 Charging Port
- 12. Nano Security Lock Slot (Lock sold separately)



Overview



Right

- 1. Power Button Key
- 2. Power Connector
- 3. USB 3.1 Gen 1 Port
- 4. HDMI Port (Cable nhot included)

- 5. USB Type-C[®] with Thunderbolt™
- 6. USB Type-C® with Thunderbolt™
- 7. SIM Card Slot¹
- 8. Touch Fingerprint Sensor (select models)

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



Overview

At a Glance

- Premium ultraslim design with precision-crafted machined aluminum (CNC) chassis for a premium look and feel
- 10th Generation Intel® Core™ i5 up to quad-core, i7 Processors up to six-core
- Preinstalled with Windows 10 versions or FreeDOS
- Designed to support USB-C[®] and Thunderbolt HP docking options including the HP Universal Dock G5
- Featuring redesigned Bottom-Mount quiet HP Keyboard with the HP Programmable key and backlit options
- 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 ultrabright displays with ambient light sensor
- Choice of displays:
 - -39.6 cm (15.6") diagonal FHD IPS Anti-Glare LED-backlit, 250 nits, 45% NTSC
 - -39.6 cm (15.6") diagonal FHD IPS Anti-Glare LED-backlit non-touch 1W low power, 400 nits, 72% NTSC
 - -39.6 cm (15.6") diagonal UHD IPS Anti-Glare LED-backlit non-touch, 400 nits, 72% NTSC
 - -39.6 cm (15.6") diagonal FHD IPS Anti-Glare On-Cell LED-backlit touch, 250 nits, 45% NTSC
- Optional NVIDIA GeForce MX250 discrete graphics with 2GB GDDR5 video memory
- Enterprise grade security with HP Sure Sense⁴, HP SureStart Gen6, HP Privacy Camera, HP Sure Run Gen2, HP Sure Recover Gen2 with Embedded Reimaging¹, HP Sure Click, SmartCard Reader¹ and Touch Fingerprint reader⁵ (select models)
- Ultimate connectivity with optional CAT16 4G/LTE WWAN and Wi-Fi 6 WLAN
- Supports fast charging (50% in 30 minutes) with no impact on battery recharge cycles²
- UMA graphics: Up to 24 hours (Intel® 10th generation CPU and 3-cell 56 WHr battery)
- Discrete graphics: Up to 21 hours and 15 minutes (Intel® 10th generation CPU and 3-cell 56 WHr battery)
- Choice of solid state drives up to 1 TB and DDR4 memory up to 64 GB
- Battery life up to 24 hours (Intel® 10th generation CPU and 3-cell 56 WHr battery)
- Tested for 19 MIL-STD 810H tests⁴
- Intel® UHD Premium Graphics
- 1. Sold separately or as an optional feature
- 2. Recharges your 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.
- 3. MIL-STD 810H is not intended to demonstrate fitness of 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 Sense requires Windows 10. See product specifications for availability.
- 5. HP Fingerprint Sensor is an optional feature and requires configuration at purchase.

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



Technical Specifications

PRODUCT NAME

HP EliteBook 850 G7 Notebook PC

OPERATING SYSTEMS

Preinstalled Windows 10 Pro 64 – HP recommends Windows 10 Pro for business¹

Windows 10 Pro 64 (National Academic only)²

Windows 10 Home 642

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 Window. 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. A full list of HP products and the Windows 10 versions tested is available on the HP support website. https://support.hp.com/us-en/document/c05195282

PROCESSORS

Intel® Core™ i7-10810U with Intel® UHD Graphics Premium (1.1 GHz base frequency, up to 4.0 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 6 cores)^{3,4,5,6}

Intel® Core™ i7-10710U with Intel® UHD Graphics Premium (1.1 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 6 cores)^{3,4,5,6}

Intel® Core™ i7-10610U with Intel® UHD Graphics Premium (1.8 GHz base frequency, up to 4.3 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores)^{3,4,5,6}

Intel® Core™ i7-10510U with Intel® UHD Graphics Premium (1.8 GHz base frequency, up to 4.9 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores)^{3,4,5,6}

Intel® Core™ i5-10310U with Intel® UHD Graphics Premium (1.7 GHz base frequency, up to 4.8 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores)^{3,4,5,6}

Intel® Core™ i5-10210U with Intel® UHD Graphics Premium (1.6 GHz base frequency, up to 4.2 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores)^{3,4,5,6}

Processor Family

10th Generation Intel® Core™ i7 processors (i7-10810U, i7-10710U, i7-10610U, i7-10510U)

10th Generation Intel® Core™ i5 processors (i5-10310U, i5-10210U)



Technical Specifications

- 3. Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.
- 4. Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode. 5. Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost for more information.
- 6. 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

GRAPHICS

Integrated

Intel® UHD Premium Graphics⁷

Discrete

NVIDIA® GeForce® MX250 (2 GB DDR5 video memory)9

Supports

Support HD decode, DX12, HDMI 1.4b8

- 7. HD content required to view HD images.
- 8. HDMI cable sold separately.
- 9. Integrated graphics depends on processor. NVIDIA® Optimus™ technology requires an Intel processor, plus an NVIDIA® GeForce® discrete graphics configuration and is available on Windows 10 Pro OS. With NVIDIA® Optimus™ technology, full enablement of all discrete graphics video and display features may not be supported on all systems (e.g. OpenGL applications will run on the integrated GPU or the APU as the case may be).

DISPLAY

Non-Touch

39.6 cm (15.6") diagonal FHD IPS eDP anti-glare WLED-backlit bent, 250 nits, 45% NTSC (1920 x 1080)^{7,10,11}
39.6 cm (15.6") diagonal FHD IPS eDP anti-glare WLED-backlit bent for HD camera, 250 nits, 45% NTSC (1920 x 1080)^{7,10,11}
39.6 cm (15.6") diagonal FHD IPS eDP anti-glare WLED-backlit bent for HD+IR camera, 250 nits, 45% NTSC (1920 x 1080)^{7,10,11}
39.6 cm (15.6") diagonal FHD IPS eDP anti-glare WLED-backlit bent for WWAN, 250 nits, 45% NTSC (1920 x 1080)^{7,10,11}
39.6 cm (15.6") diagonal FHD IPS eDP anti-glare WLED-backlit bent for HD camera and WWAN, 250 nits, 45% NTSC (1920 x 1080)^{7,10,11}

39.6 cm (15.6") diagonal FHD IPS eDP anti-glare WLED-backlit bent for HD+IR camera and WWAN, 250 nits, 45% NTSC $(1920 \times 1080)^{7,10,11}$

39.6 cm (15.6") diagonal FHD IPS eDP + PSR anti-glare WLED-backlit bent with Ambient Light Sensor for HD+IR camera, 400 nits, low power, 100% NTSC(1920 x 1080) 7,10,11

39.6 cm (15.6") diagonal FHD IPS eDP + PSR anti-glare WLED-backlit bent with Ambient Light Sensor for HD+IR camera and WWAN, 400 nits, low power, 100% NTSC(1920 x 1080)^{7,10,11}

39.6 cm (15.6") diagonal 4k IPS eDP + PSR anti-glare WLED-backlit bent with Ambient Light Sensor for HD+IR camera, 400 nits, low power, 100% NTSC (3840 x 2160)^{7,10,11}



Technical Specifications

39.6 cm (15.6") diagonal FHD IPS eDP + PSR anti-glare WLED-backlit bent with Ambient Light Sensor for HD+IR camera and WWAN, 400 nits, low power, 100% NTSC (3840 x 2160)^{7,10,11}

Touch

39.6 cm (15.6") diagonal FHD IPS eDP anti-glare WLED-backlit bent touch-on-panel screen for HD+IR camera, 250 nits, 45% NTSC (1920 x 1080) 7,10,11

39.6 cm (15.6") diagonal FHD IPS eDP anti-glare WLED-backlit bent touch-on-panel screen for HD+IR camera and WWAN, 250 nits, 45% NTSC (1920 x 1080) 7,10,11

Display Size

15.6" 39.6 cm

HDMI 1.4b

Supports resolution up to 4k @ 60 Hz via DP and 30Hz via HDMI

- 7. HD content required to view HD images.
- 10. Sold separately or as an optional feature.
- 11. Resolutions are dependent upon monitor capability, and resolution and color depth settings.

Docking station model	Total number of supported displays (incl. the notebook) display)	Max.resolutions supported	Dock Connectors	Technicallimitations
HP Thunderbolt Dock G2	3	Dual 4K @ 60Hz	2xDP, 1xVGA, 1xTB, 1xUSB-C alt- mode	Dual 4k (4096 x 2160) only with: • 1 DP + TB port or • USB-C alt mode + TB port Dual 4K (3840 x 2160) with any of the DP, TB or USB-C alt mode video ports
HP Elite USB-C Dock G5	3	Three 1680x1050 @ 60 Hz Dual 2K @ 60Hz Single 4K @ 60Hz (3840 x 1440)	1xHDMI, 2xDP	
HP USB-C Universal Dock G2	3	Dual 4K @ 60Hz Single 5K @ 60Hz	1xHDMI, 2xDP	
HP USB-C Travel Dock	2	Single 2K @ 60Hz	1xHDMI, 1xVGA	Single external display Only HDMI or VGA at the time



Technical Specifications

STORAGE AND DRIVES

Primary M.2 Storage

128 GB SATA-3 SS TLC¹³
256 GB PCIe NVMe Value SS¹³
256 GB PCIe Gen3x4 NVMe SS TLC¹³
256 GB PCIe TLC Opal 2¹³
256 GB PCIe Gen3x2x2 SS QLC+16 GB Intel Optane™ Memory¹³
512 GB PCIe NVMe Value SS¹³
512 GB PCIe Gen3x4 NVMe SS TLC¹³
512 GB Intel® PCIe® NVMe™ QLC + 32 GB Intel® Optane™ Memory¹³
512 GB PCIe Gen3x4 NVMe SS TLC Opal 2¹³
1 TB PCIe Gen3x4 NVMe SS TLC¹³

13. 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

64 GB DDR4-2666 SDRAM (2 X 32 GB)¹⁴

Memory

32 GB DDR4-2666 SDRAM (2 X 16 GB)¹⁴
16 GB DDR4-2666 SDRAM (1 X 16 GB)¹⁴
16 GB DDR4-2666 SDRAM (2 X 8 GB)¹⁴
8 GB DDR4-2666 SDRAM (1 x 8 GB)¹⁴
8 GB DDR4-2666 SDRAM (2 x 4 GB)¹⁴
4 GB DDR4-2666 SDRAM (1 x 4 GB)¹⁴

Memory Slots

2 SODIMM Both slots are customer accessible / upgradeable DDR4 SODIMMS, system runs at 2666 Supports Dual Channel Memory

14. 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.



Technical Specifications

NETWORKING/COMMUNICATIONS

WLAN

Intel® Dual Band Wireless-AX201 802.11a/b/g/n/ac (2x2) Wi-Fi 6 and Bluetooth® 5 Combo, vPro®15 Intel® Dual Band Wireless-AX201 802.11a/b/g/n/ac (2x2) Wi-Fi 6 and Bluetooth® 5 Combo, non-vPro®15

WWAN*

Intel® XMM™ 7360 LTE-Advanced Cat 9
Intel® XMM™ 7560 LTE-Advanced Pro Cat 16¹⁶

NFC

NPC300 Near Field Communication module

Miracast

Native Miracast Support¹⁷

15. 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.

16. Gigabit class Category 16 4G LTE module is optional and must be configured at the factory. Module designed for up to 1 Gbps download speeds as carriers deploy 5 carrier aggregation and 100Mhz channel bandwidth, requires activation and separately purchased service contract. Backwards compatible to HSPA 3G technologies. Check with service provider for coverage and availability in your area. Connection, upload and download speeds will vary due to network, location, environment, network conditions, and other factors. 4G LTE not available on all products, in all regions.

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

* 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

AUDIO/MULTIMEDIA

Audio

Audio by Bang & Olufsen 2 Integrated stereo speakers Integrated 3 Multi Array Microphone

Camera

720p HD Camera^{7,10} 720p HD+IR Camera^{7,10}

Sensors

Ambient light sensor Hall Sensor

7. HD content required to view HD images. 10. Sold separately or as an optional feature.

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

Keyboard

HP Premium Collaboration Keyboard with Numeric Keypad, spill resistant Optional backlit keyboard and DuraKeys*

Pointing Device

Clickpad with multi-touch gesture support, taps enabled as default Microsoft Precision Touchpad Default Gestures Support

Function Keys

F1 - Display Switching

F2 - Blank or Privacy (with LED)

F3 - Brightness Down

F4 - Brightness Up

F5 - Audio Mute

F6 - Volume Down

F7 - Volume Up

F8 - Mic Mute

F9 - Blank or Backlit Toggle

F10 - Insert

F11 - Airplane Mode

F12 - HP Programmable Key

Print Screen

Power Button (with LED)

Hidden Function Keys

Fn+R - Break

Fn+S - Sys Rq

Fn+C - Scroll Lock



^{*} Keyboards are made from up to 65% post-consumer recycled plastic

Technical Specifications

SOFTWARE AND SECURITY

Preinstalled Software

BIOS

HP BIOSphere Gen5¹⁹
HP Drive Lock & Automatic Drive Lock
BIOS Update via Network
Power On Authentication
HP Secure Erase²⁰
Absolute Persistence Module²¹
Pre-boot Authentication

Software

HP Connection Optimizer HP Hotkey Support HP JumpStart HP Support Assistant²² HP Noise Cancellation Software Buy Office (sold separately)

Manageability Features

HP Driver Packs²³
HP System Software Manager (SSM)
HP BIOS Config Utility (BCU)
HP Client Catalog
HP Manageability Integration Kit Gen4²⁴
HP Image Assistant
HP Client Management Script Library
Ivanti Management Suite
HP Cloud Recovery

Client Security Software

HP Client Security Manager Gen6²⁵ HP Fingerprint Sensor²⁶ (select models) HP Power On Authentication Windows Defender²⁷

Security Management Pre-boot Authentication

TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified)²⁸ USB enable/disable (via BIOS)
Power-on password (via BIOS)
Setup password (via BIOS)
Support for chassis padlocks and cable lock devices
HP Sure Click²⁹
HP Sure Start Gen6³⁰

HP Sure Start Gen6³⁰ HP Sure Run Gen3³¹ HP Sure Recover Gen3³² HP Sure Sense³³

Smartcard Reader

Model number: Alcor AU9560 FIPS 201 Compliant: Yes

TPM



Technical Specifications

Model: Infineon SLB9670 Version: 7.85 Revision: TPM 2.0

FIPS 140-2 Compliant: Yes

19. 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.

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. HP Support Assistant requires Windows and Internet access.
- 23. HP Driver Packs not preinstalled, however available for download at http://www.hp.com/go/clientmanagement.
- 24. HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html.
- 25. HP Client Security Manager Gen6 requires Windows and is available on the select HP Pro and Elite PCs.
- 26. HP Fingerprint Sensor is an optional feature and requires configuration at purchase.
- 27. Windows Defender Opt in and internet connection required for updates.
- 28. 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).
- 29. HP Sure Click is available on select HP platforms and supports Microsoft Internet Explorer, Google Chrome™, 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.
- 30. HP Sure Start Gen6 is available on select HP PCs with Intel processors.
- 31. HP Sure Run Gen3 is available on select Windows 10 based HP Pro, Elite and Workstation PCs with select Intel® or AMD processors.
- 32. HP Sure Recover Gen3 is available on select HP PCs and requires an open 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.
- 33. HP Sure Sense requires Windows 10.

Smart	Card	Reader
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Smart card standard Dimensions (L x W x H) **Smart Card support Smart Card Interface**

PC/SC 2.0 for Windows smart card standard 0.41x 0.08 x 0.32 in (10.5 x 2 x 8.2 mm) ISO 7816 Class A and AB smart cards

Smart Card Interface with T = 0 and T = 1 support Support I2C memory card, SLE4418, SLE4428, SLE4432, SLE4442, SLE4436, SLE5536, SLE6636, AT88SC1608, AT45D041 card and AT45DB041 card via external EEPROM



Technical Specifications

POWER

HP Smart 45 W External AC power adapter³⁴
HP Smart 45 W External AC power adapter, 2-prong (Japan only)³⁴
HP Smart 65 W External AC power adapter³⁴
HP Smart 65 W EM External AC power adapter³⁴
65 W USB Type-C[®] adapter³⁴
65 W slim USB Type-C[®] adapter³⁴

Primary Battery

HP Long Life 3-cell, 56 Wh Li-ion³⁵
Support HP Fast Charge (Up to 50% in 30 minutes with 65W AC Adapter)³⁶

Power Cord

2-wire plug - 1.0 m³⁴ 3-wire plug - 1.0 m³⁴ 3-wire plug - 1.0 m (Premium)³⁴

Battery life

UMA graphics: Up to 24 hours (Intel® 10th generation CPU and 3-cell 56 WHr battery)³⁷

MM18 Battery life

UMA graphics: Up to 15 hours and 30 minutes (Intel® 10th generation CPU and 3-cell 56 WHr battery)³⁷

Battery Weight

0.215 kg (0.47 lb)

- 34. Availability may vary by country.
- 35. Battery is internal and not replaceable by customer. Serviceable by warranty.
- 36. 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.
- 37. 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 https://www.bapco.com for additional details.

WEIGHTS & DIMENSIONS

Product Weight

Starting weight: 3.74 lb (non-touch); Starting at 3.92 lb (touch)³⁸ Starting weight: 1.70 kg (non-touch); Starting at 1.78 kg (touch)³⁸

Product Dimensions (W x D x H) Non-Touch, WLAN only 14.16 x 9.20 x 0.76 in 35.97 x 23.38 x 1.92 cm

Touch, WLAN only

14.16 x 9.20 x 0.79 in 35.97 x 23.38 x 2.0 cm

WWAN

14.16 x 9.20 x 0.79 in



Technical Specifications

35.97 x 23.38 x 2.0 cm

38. Weight will vary by configuration.

PORTS/SLOTS

2 USB 3.1 Type-C® with Thunderbolt™ support, DisplayPort™ 1.2 2 USB 3.1 Gen 1 (1 charging) 1 HDMI 1.4⁸ 1 Headphone/microphone combo 1 AC power 1 nano SIM card slot* 1 Smartcard reader (optional)

Nano Security Lock Slot (Lock sold separately)

8. HDMI cable sold separately.

*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

SERVICE AND SUPPORT

HP Services offers 1-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. Onsite 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.39

39. 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

Stand-Alone Power

Requirements (AC Power)

Average Operating Power 2.42 W

Integrated Graphics 6.78 W

Max Operating Power Discrete < 65 W UMA < 45 W

Temperature Operating 32° to 95° F (0° to 35° C) (No writing optical)

Non-operating 41° to 95° F (5° to 35° C) (Writing optical)

19 V

Relative Humidity Operating 10% to 90%, non-condensing

Non-operating 5% to 95%, 101.6° F (38.7° C) maximum wet bulb temperature

Shock Operating 40 G, 2 ms, half-sine

Nominal Operating

Non-operating 200 G, 2 ms, half-sine

Random Vibration Operating 0.75 grms

Non-operating 1.50 grms

Altitude (unpressurized) Operating -50 to 10,000 ft (-15.24 to 3,048 m)

Non-operating -50 to 40,000 ft (-15.24 to 12,192 m)

Planned Industry StandardULYesCertificationsCSAYesFCC ComplianceYes

FCC Compliance Yes
ENERGY STAR® qualified Select models⁴⁰

EPEAT® 2019 Yes, Gold in U.S.⁴¹

ICES Yes
Australia Yes
NZ A-Tick Compliance Yes
CCC Yes
Japan VCCI Compliance Yes
KC Yes

BSMI Yes
CE Marking Compliance Yes
BNCI or BELUS Yes
CIT Yes
GOST Yes

Saudi Arabian Compliance Yes

(ICCP)

SABS Yes

40. Configurations of the HP EliteBook 850 G7 that are ENERGY STAR® certified are identified as HP EliteBook 850 G7 ENERGY STAR on HP websites and on http://www.energystar.gov.

41. 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 15.6 inch diagonal FHD (1920 x 1080) Active Area Anti-Glare WLED UWVA 45% Weight NTSC 250 nits eDP 1.2 w/o **PSR** bent NWBZ

Outline Dimensions (W x H x D) 350.96 x 205.54 mm (max) 344.16 x 193.59 mm (typ.)

370 g (max) **Diagonal Size** 15.6 inch

Thickness 3.0 mm/ 5.0 mm (w/PCB) (max)

Interface eDP 1.2 (2 lane) **Surface Treatment** Anti-Glare **Touch Enabled** No

Contrast Ratio 600:1 (tvp.) **Refresh Rate** 60 Hz **Brightness** 250 nits

Pixel Resolution 1920 x 1080 (FHD)

Format of LCD Pixel Arrangement RGB Stripe

Backlight LED

45% of NTSC **Color Gamut Coverage**

Color Depth 6 bits (Hi FRC supportive w/ condition to enable)

UWVA 85/85/85/85 **Viewing Angle**

Panel LCD 15.6 inch diagonal FHD (1920 x 1080) Active Area **Anti-Glare WLED UWVA 45%** NTSC 250 nits eDP 1.2 w/o **PSR bent Touch on Panel NWBZ**

Outline Dimensions (W x H x D)

350.96 x 205.74 mm (max) 344.16 x 193.59 mm (typ.)

Weight 380 g (max) **Diagonal Size** 15.6 inch

3.2mm/ 5.2mm (PCB) (max) **Thickness**

Interface eDP 1.2

Surface Treatment Anti-Glare On-cell

Touch Enabled

Contrast Ratio 600:1 (tvp.) **Refresh Rate** 60 Hz **Brightness** 250 nits

Pixel Resolution 1920 x 1080 (FHD)

Format of LCD Pixel Arrangement RGB Stripe Backlight LED

Color Gamut Coverage 45% of NTSC

Color Depth 6 bits

Viewing Angle UWVA 85/85/85/85



Technical Specifications

Panel LCD 15.6 inch diagonal FHD (1920 x 1080) Anti-Glare WLED UWVA 100% NTSC 400 nits eDP 1.4+PSR2 bent LP NWBZ

Outline Dimensions (W x H x D) 349.46 x 204.79 mm (max)

 Active Area
 344.16 x 193.59 mm (typ.)

 Weight
 325 g (max)

Diagonal Size 15.6 inch
Thickness 2.6mm / 4.6mm (PCB) (max)

InterfaceeDP 1.4Surface TreatmentAnti-Glare

Touch Enabled No

Contrast Ratio 1200:1 (typ.)
Refresh Rate 60 Hz

Brightness 400 nits

Pixel Resolution 1920 x 1080 (FHD) **Format of LCD Pixel Arrangement** RGB Stripe

Backlight LED

Color Gamut Coverage 100% of NTSC

Color Depth 8 bit

Viewing Angle UWVA 85/85/85

Panel LCD 15.6 inch
diagonal UHD (3840 x 2160)
Active Area
Anti-Glare WLED UWVA
100% NTSC 400 nits eDP
1.4+PSR2 bent LP NB2Y
Diagonal Si

 Outline Dimensions (W x H x D)
 349.52 x 205.42 mm (max)

 Active Area
 344.22 x 193.62 mm (typ.)

Weight 320 g (max)

Diagonal Size 15.6 inch

Thickness 2.6mm / 4.6mm (PCB) (max)

InterfaceeDP 1.4Surface TreatmentAnti-Glare

Touch Enabled No

Contrast Ratio1200:1 (typ.)Refresh Rate60 HzBrightness400 nits

Pixel Resolution 3840 x 2160 (UHD)

Format of LCD Pixel Arrangement RGB Stripe

Backlight LED

Color Gamut Coverage 100% of NTSC only for UHD LP

Color Depth 8 bit

Viewing Angle UWVA 85/85/85



Technical Specifications

STORAGE AND DRIVES

SSD 128 GB 2280 M2 SATA- Form Factor 3 TLC

Form Factor M.2 2280
Capacity 128 GB
NAND Type TLC

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

 Interface
 ATA-8, SATA 3.0

 Maximum Sequential Read
 550 ~ 560 MB/s

 Maximum Sequential Write
 380 ~ 530 MB/s

 Logical Blocks
 250,069,680

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp] **Features** ATA Security; DIPM; TRIM; DEVSLP

SSD 1 TB 2280 PCIe-3x4 NVMe Three Layer Cell single-sided Form Factor M.2 2280
Capacity 1 TB
NAND Type TLC

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

 Interface
 PCle NVMe Gen3X4

 Maximum Sequential Read
 3100 ~ 3500 MB/s

 Maximum Sequential Write
 2770 ~ 3037 MB/s

 Logical Blocks
 2,000,409,264

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp]

Features ATA Security; TRIM; L1.2

SSD 256 GB 2280 M2 PCIe-3x4 SS NVMe TLC Form Factor M.2 2280
Capacity 256 GB
NAND Type TLC

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

 Interface
 PCle NVMe Gen3X4

 Maximum Sequential Read
 2800 ~ 3500 MB/s

 Maximum Sequential Write
 1400 ~ 2200 MB/s

 Logical Blocks
 500,118,192

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp]

Features ATA Security; TRIM; L1.2



Technical Specifications

SSD 256 GB 2280 PCIe NVMe Value

Form Factor M.2 2280
Capacity 256 GB
NAND Type Value

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

 Interface
 PCle NVMe Gen3

 Maximum Sequential Read
 2100 ~ 2200 MB/s

 Maximum Sequential Write
 900 ~ 1400 MB/s

 Logical Blocks
 500,118,192

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp] **Features** ATA Security (optional); TRIM; L1.2

SSD 256 GB 2280 PCIe-3x2x2 NVMe+SSD 16 GB Intel® Optane™ Form Factor M.2 2280 Capacity 256 GB

 NAND Type
 QLC+3D XPoint

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

InterfacePCIe NVMe Gen3X2X2Maximum Sequential ReadUp to 1450 MB/sMaximum Sequential WriteUp to 500 MB/sLogical Blocks500,118,192

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp]

Features ATA Security; TRIM; L1.2

SSD 256 GB 2280 PCIe-3x4 Form Fac NVMe Self Encrypted OPAL2 Capacity Three Layer Cell

Form Factor M.2 2280
Capacity 256 GB
NAND Type TLC

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

 Interface
 PCIe NVMe Gen3X4

 Maximum Sequential Read
 2800 ~ 3500 MB/s

 Maximum Sequential Write
 1663 ~ 2200 MB/s

 Logical Blocks
 500,118,192

Operating Temperature32° to 158°F (0° to 70°C) [ambient temp]FeaturesATA Security (Option); TCG Opal 2.0; TRIM; L1.2



Technical Specifications

SSD 512 GB 2280 M2 PCIe-3x4 SS NVMe TLC

Form Factor M.2 2280
Capacity 512 GB
NAND Type TLC

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

 Interface
 PCle NVMe Gen3X4

 Maximum Sequential Read
 3100 ~ 3500 MB/s

 Maximum Sequential Write
 2400 ~ 2956 MB/s

 Logical Blocks
 1,000,215,215

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp]

Features ATA Security; TRIM; L1.2

SSD 512 GB 2280 PCIe NVMe Value Form Factor M.2 2280
Capacity 512 GB
NAND Type Value

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

 Interface
 PCIe NVMe Gen3

 Maximum Sequential Read
 2200 ~ 2300 MB/s

 Maximum Sequential Write
 1000 ~ 1600 MB/s

 Logical Blocks
 1,000,215,215

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp] **Features** ATA Security (optional); TRIM; L1.2

SSD 512 GB 2280 PCle-3x2x2 NVMe+SSD 32 GB Intel® Optane™ Form Factor M.2 2280 Capacity 512 GB

 NAND Type
 QLC+3D XPoint

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

InterfacePCIe NVMe Gen3X2X2Maximum Sequential ReadUp to 2400 MB/sMaximum Sequential WriteUp to 1300 MB/sLogical Blocks1,000,215,215

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp]

Features ATA Security; TRIM; L1.2



Technical Specifications

SSD 512 GB 2280 PCIe-3x4 NVMe Self Encrypted OPAL2 Three Layer Form Factor M.2 2280
Capacity 512 GB
NAND Type TLC

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Weight
 0.02 lb (10 g)

 Interface
 PCle NVMe Gen3X4

 Maximum Sequential Read
 3100 ~ 3500 MB/s

 Maximum Sequential Write
 2400 ~ 2956 MB/s

 Logical Blocks
 1,000,215,215

Operating Temperature 32° to 158°F (0° to 70°C) [ambient temp]

Features ATA Security (Option); TCG Opal 2.0; TRIM; L1.2



Technical Specifications

NETWORKING/COMMUNICATIONS

Intel® Wi-Fi 61 AX201 and Wireless LAN Standards IEEE 802.11a IEEE 802.11b Bluetooth® 5.0 802.11ax IEEE 802.11q (2x2) supporting gigabit IEEE 802.11n file transfer speeds. IEEE 802.11ac vPro® IEEE 802.11ax IEEE 802.11d

IEEE 802.11e IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v

Interoperability Wi-Fi CERTIFIED™ **Frequency Band** •802.11b/g/n/ax 2.402 - 2.482 GHz

•802.11a/n/ac/ax 4.9 - 4.95 GHz (Japan) 5.15 - 5.25 GHz 5.25 - 5.35 GHz 5.47 - 5.725 GHz 5.825 - 5.850 GHz

Data Rates •802.11b: 1, 2, 5.5, 11 Mbps

> •802.11q: 6, 9, 12, 18, 24, 36, 48, 54 Mbps •802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps •802.11n: MCS 0 ~ MCS 15, (20MHz, and 40MHz)

•802.11ac: MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, 80MHz &

160MHz)

•802.11ax: MCS0 ~ MCS11, (1SS and 2SS) (20MHz, 40MHz, 80MHz &

160MHz)

Modulation **Direct Sequence Spread Spectrum**

OFDM, BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024QAM

Security³ •IEEE 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

Network Architecture

Models Roaming Ad-hoc (Peer to Peer)

Infrastructure (Access Point Required)

IEEE 802.11 compliant roaming between access points

Output Power² • 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



Technical Specifications

802.11ac VHT160(5GHz): +11.5dBm minimum
 802.11ax HT40(2.4GHz): +10dBm minimum
 802.11ax VHT160(5GHz): +10dBm minimum

Power Consumption • Transmit mode: 2.0 W

•Receive mode: 1.6 W

Idle mode (PSP) 180 mW (WLAN Associated)
Idle mode: 50 mW (WLAN unassociated)
Connected Standby/Modern Standby: 10mW

Radio disabled: 8 mW

Power Management ACPI and PCI Express compliant power management

802.11 compliant power saving mode

Receiver Sensitivity⁴ •802.11b, 1Mbps: -93.5dBm maximum

802.11b, 11Mbps: -84dBm maximum
802.11a/g, 6Mbps: -86dBm maximum
802.11a/g, 54Mbps: -72dBm maximum
802.11n, MCS07: -67dBm maximum
802.11n, MCS15: -64dBm maximum
802.11ac, MCS0: -84dBm maximum
802.11ac, MCS9: -59dBm maximum
802.11ac, MCS1(HT40): -59dBm maximum
802.11ax, MCS11(HT40): -59dBm maximum
802.11ax, MCS11(VHT160): -58.5dBm maximum

Antenna type High efficiency antenna with spatial diversity, mounted in the display

enclosure

Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications

Form Factor PCI-Express M.2 MiniCard with CNVi Interface

Dimensions 1. Type 2230: 2.3 x 22.0 x 30.0 mm 2. Type 1216: 1.67 x 12.0 x 16.0 mm

Weight 1. Type 2230: 2.8 g

2. Type 126: 1.3 g

Operating Voltage 3.3v +/- 9%

Temperature Operating 14° to 158° F (–10° to 70° C)

Non-operating -40° to 176° F (-40° to 80° C)

Humidity Operating 10% to 90% (non-condensing)

Non-operating 5% to 95% (non-condensing)

Altitude Operating 0 to 10,000 ft (3,048 m)

Non-operating 0 to 50,000 ft (15,240 m)

LED Activity LED Amber – Radio OFF

LED White - Radio ON

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

Bluetooth Specification 4.0/4.1/4.2/5.0/5.1 Compliant

Frequency Band 2402 to 2480 MHz

Number of Available Legacy: 0~79 (1 MHz/CH) **Channels** BLE: 0~39 (2 MHz/CH)

Signaling Data Rate 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



Technical Specifications

Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps

asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)

Transmit Power The Bluetooth component shall operate as a Class II Bluetooth device with

a maximum transmit power of + 9.5 dBm for BR and EDR.

Power Consumption Peak (Tx) 330 mW

Peak (Rx) 230 mW

Selective Suspend 17 mW

Bluetooth Software

Supported Link Topology Microsoft Windows Bluetooth Software

Power Management Microsoft Windows ACPI, and USB Bus Support **Certifications** FCC (47 CFR) Part 15C, Section 15.247 & 15.249

Power Management Certifications ETS 300 328, ETS 300 826 Low Voltage Directive IEC950

UL, CSA, and CE Mark

Bluetooth Profiles Supported

BT4.1-ESR 5/6/7 Compliance

LE Link Layer Ping LE Dual Mode LE Link Layer

LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels

Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance

LE Secure Connection- Basic/Full LE Privacy 1.2 -Link Layer Privacy

LE Privacy 1.2 –Extended Scanner Filter Policies

LE Data Packet Length Extension

FAX Profile (FAX)

Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP)

Advanced Audio Distribution Profile (A2DP)

Security & Manageability Intel® vPro® support with appropriate Intel® chipset components

1. 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.

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

Intel® Wi-Fi 6¹ AX201 and Wireless LAN Standards
Bluetooth® 5.0 802.11ax
(2x2), supporting gigabit
file transfer speeds
non-vPro®

IEEE 802.11b
IEEE 802.11g
IEEE 802.11n
IEEE 802.11ac
IEEE 802.11ac
IEEE 802.11ac
IEEE 802.11d
IEEE 802.11d
IEEE 802.11d

IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v

InteroperabilityWi-Fi CERTIFIED™Frequency Band•802.11b/g/n/ax

2.402 – 2.482 GHz •802.11a/n/ac/ax 4.9 – 4.95 GHz (Japan) 5.15 – 5.25 GHz 5.25 – 5.35 GHz 5.47 – 5.725 GHz 5.825 – 5.850 GHz

Data Rates •802.11b: 1, 2, 5.5, 11 Mbps

•802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps •802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps •802.11n: MCS 0 ~ MCS 15, (20MHz, and 40MHz)

•802.11ac: MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, 80MHz &

160MHZ)

802.11ax: MCS0 ~ MCS11, (1SS and 2SS) (20MHz, 40MHz, 80MHz &

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Modulation Direct Sequence Spread Spectrum

OFDM, BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024QAM

Security³ •IEEE compliant 64 / 128 bit WEP encryption for a/b/g mode only

•AES-CCMP: 128 bit in hardware

•802.1x authentication

•WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES.

•WPA2 certification •IEEE 802.11i

•WAPI

Network Architecture

Models

Output Power²

Ad-hoc (Peer to Peer)

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Roaming IEEE 802.11 compliant roaming between access points

802.11b: +18.5dBm minimum
802.11g: +17.5dBm minimum
802.11a: +18.5dBm minimum

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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



Technical Specifications

802.11ax HT40(2.4GHz): +10dBm minimum
 802.11ax VHT160(5GHz): +10dBm minimum

Power Consumption •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 10mWRadio disabled 8 mW

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802.11 compliant power saving mode

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802.11a/g, 54Mbps: -72dBm maximum
802.11n, MCS07: -67dBm maximum
802.11n, MCS15: -64dBm maximum
802.11ac, MCS0: -84dBm maximum
802.11ac, MCS9: -59dBm maximum

•802.11ax, MCS11(HT40): -59dBm maximum •802.11ax, MCS11(VHT160): -58.5dBm maximum

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Non-operating -40° to 176° F (-40° to 80° C)

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Non-operating 5% to 95% (non-condensing)

Altitude Operating 0 to 10,000 ft (3,048 m)

Non-operating 0 to 50,000 ft (15,240 m)

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LED Off - Radio ON

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1. Actual throughput may vary.

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

channels



Technical Specifications

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asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)

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a maximum transmit power of + 9.5 dBm for BR and EDR.

Power Consumption Peak (Tx) 330 mW

Peak (Rx) 230 mW

Selective Suspend 17 mW

Bluetooth Software

Supported Link Topology

Microsoft Windows Bluetooth Software

Power Management Microsoft Windows ACPI, and USB Bus Support **Certifications** FCC (47 CFR) Part 15C, Section 15.247 & 15.249

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UL, CSA, and CE Mark

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LE Link Layer Ping LE Dual Mode LE Link Layer

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LE Privacy 1.2 –Extended Scanner Filter Policies

LE Data Packet Length Extension

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Advanced Audio Distribution Profile (A2DP)

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- 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

Intel® XMM™ 7560 LTE-Advanced Pro DL CAT16¹ Technology/Operating

bands

FDD LTE: 2100 (Band 1), 1900 (Band 2), 1800 (Band 3),

1700/2100 (Band 4), 850 (Band 5), 2600 (Band 7), 900 (Band 8), 700 (Band 12 lower), 700 (Band 13 upper), 700 (Band 14 upper), 700 (Band 17 lower), 850 (Band 18 lower), 850 (Band 19 upper), 800 (Band 20), 1900 (Band 25), 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), 3500 (Band 42), 5200 (Band 46 RX only)

HSPA+: 2100 (Band 1), 1900 (Band 2), 1700/2100 (Band 4),

850 (Band 5), 900 (Band 8) MHz

Wireless protocol

standards

3GPP Release 12 LTE Specification DL-CAT.16, DL 100MHz BW

throughput up to 978Mbps; UL-CAT.7 20MHz throughput up to 75Mbps WCDMA R99, 3GPP Release 5, 6, 7 and 8 UMTS Specification

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

GPS bands 1575.42 MHz ± 1.023 MHz, GLONASS 1596-1607MHz, Beidou 1561.098

MHz

Maximum data rates LTE: 978 Mbps (Download), 75 Mbps (Upload)

DC-HSPA+: 42 Mbps (Download), 5.76 Mbps (Upload) HSPA+: 21 Mbps (Download), 5.76 Mbps (Upload)

Maximum output power LTE: 23 dBm in all band except B41

LTE B41 HPUE = 26 dBm HSPA+: 23.5 dBm

Maximum powerLTE: 1,200 mA (peak); 900 mA (average)consumptionHSPA+: 1,100 mA (peak); 800 mA (average)

Form Factor M.2, 3042-S3 Key B

Weight 6 g

Dimensions

(Length x Width x

Thickness)

42 x 30 x 2.3 mm

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

Intel® XMM™ 7360 LTE-Advanced CAT9¹ Technology/Operating

bands

FDD LTE: 2100 (Band 1), 1900 (Band 2), 1800 (Band 3),

1700/2100 (Band 4), 850 (Band 5), 2600 (Band 7), 900 (Band 8), 1400 (Band 11), 700 (Band 12 lower), 700 (Band 13 upper), 700 (Band 17 lower), 850 (Band 18 lower), 850 (Band 19 upper), 800 (Band 20), 1400 (Band 21), 850 (Band 26), 700 (Band 28), 700 (Band 29 RX only), 2300

(Band 30), 1700/2100 (Band 66).

TDD LTE: 2600 (Band 38), 1900 (Band 39), 2400 (Band 40), 2500 (Band

41).

HSPA+: 2100 (Band 1), 1900 (Band 2), 1700/2100 (Band 4),

850 (Band 5), 900 (Band 8) MHz

Wireless protocol standards 3GPP Release 11 LTE Specification CAT.9, DL 60MHz BW throughput up

to 450Mbps; UL 20MHz throughput up to 50Mbps

WCDMA R99, 3GPP Release 5, 6, 7 and 8 UMTS Specification

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

GPS bands 1575.42 MHz ± 1.023 MHz, GLONASS 1596-1607MHz, Beidou 1561.098

MHz



Technical Specifications

Maximum data rates LTE: 450 Mbps (Download), 50 Mbps (Upload)

> DC-HSPA+: 42 Mbps (Download), 5.76 Mbps (Upload) HSPA+: 21Mbps (Download), 5.76 Mbps (Upload)

Maximum output power LTE: 23 dBm

HSPA+: 23.5 dBm

LTE: 1,200 mA (peak); 900 mA (average) Maximum power consumption HSPA+: 1,100 mA (peak); 800 mA (average)

Form Factor M.2, 3042-S3 Key B

Weight 5.8 g

Dimensions

(Length x Width x

42 x 30 x 2.3 mm

Thickness)

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

Near Field Communications **Controller (optional)** Dimensions (L x W x H) Module 25 mm by 10 mm by 2.0 mm

Chipset NPC100 **System interface 12C**

NFC RF standards 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

ISO/IEC 14443 A

NFC Forum Support

Tag Type 1, Type 2, Type3 and Type 4, NFCIP-1 and NFCIP-2

Reader (PCD-VCD) Mode (1)

ISO/IEC 14443 B

ISO/IEC 15693 MIFARE 1K MIFARE 4K MIFARE DESFire

FeliCa

Jewel and Topaz cards

Card Emulation (PICC-VICC) Mode (1)

ISO/IEC 14443 A ISO/IEC 14443 B and B'

MIFARE FeliCa

13.56 MHz Frequency

NFC Modes Supported Reader/Writer, Peer-to-Peer **Raw RF Data Rates** 106, 212, 424, 848 kbps

0°C to 70°C Operating temperature Storage temperature -20°C to 125°C **Humidity** 10-90% operating

5-95% non-operating

Supply Operating voltage 4.35 to 5.25 Volts



Technical Specifications

Mode

I/O Voltage 1.8V or 3.3V

Power Consumption (Booster enable, VBAT= 3.3V, VCC_BOOST = 5V) Power Consumption, Typical

Polling 7.3 mA

Detected Test Tag Type 1 Total 283.8 mA

Net Module 236.8 mA

Detected Test Tag Type 2 Total 288.8 mA

Net Module 241.8 mA

Detected Test Tag Type 3 Total 287.7 mA

Net Module 240.7 mA

Detected Test Tag Type 4 Total 282.3 mA

Net Module 235.3 mA

Antenna Antenna connector, 0.5mm pitch, 7 connector FPC. Antenna matching is

external to module.



Technical Specifications

POWER

AC Adapter 45 Watt Smart nPFC Standard Barrel 4.5 mm Right Angle 1.8 m **Dimensions (H x W x D)** 95 x 45 x 26.8 mm

Weight unit: 200 g +/- 10 g

Not including power cord. Power cord varies by country

Input Input Efficiency 87.74 % at 115 Vac and 88.4 % at 230 Vac

Input frequency range 47 ~ 63Hz

Input AC current Max. 1.4 A at 90 Vac

Output Output power 45 W

DC output 19.5 V

Hold-up time 5 ms at 115 Vac input

Output current limit <8.0 A

Connector 4.5 mm Barrel Type

Environmental Design Operating 32°F to 95°F (0° to 35°C)

temperature

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

temperature

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

Humidity20% to 95%Storage Humidity10% to 95%

*CE Mark - full compliance with LVD and EMC directives

Certifications *Worldwide safety standards - IEC60950. EN60950. UL

* 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.

AC Adapter 45 Watt Smart nPFC Standard Barrel 4.5 mm Right Angle 1.8 m 2prong **Dimensions (H x W x D)** 95 x 45 x 26.8 mm

Weight unit: 200 g +/- 10 g

Not including power cord. Power cord varies by country

Input Input Efficiency 87.74 % at 115 Vac and 88.4 % at 230Vac

Input frequency range 47 ~ 63 Hz

Input AC current Max. 1.4 A at 90 Vac

Output Output power 45 W

DC output 19.5 V

Hold-up time 5 ms at 115 Vac input

Output current limit <8.0A

Connector 4.5 mm Barrel Type

Environmental Design Operating 32° to 95°F (0° to 35°C)

temperature

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

temperature

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



Technical Specifications

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.

AC Adapter 65 Watt nPFC Dimensions (H x W x D) Slim USB type C® Straight

88 x 53.5 x 21 mm

Weight 1.8 m

unit: 220 g +/- 10 g

Input

Not including power cord. Power cord varies by country

Input Efficiency

81.5% min at 115 Vac/ 230Vac @ 5V/3A 86.7% min at 115 Vac/ 230Vac @ 9V/3A 88% min at 115 Vac/ 230Vac @ 12V/5A 89% min at 115 Vac/ 230Vac @ 15V/4.33A 89% min at 115 Vac/ 230Vac @ 20V/3.25A

Input frequency range

47 ~ 63 Hz

Input AC current

1.6 A at 90 VAC and maximum load

Output Output power 65 W

> **DC** output 5V/9V/12V/15V/20V Hold-up time 5ms at 115 Vac input

Output current limit <8.0A

Connector

USB Type C®

Environmental Design

Operating temperature 32° to 95°F (0° to 35°C)

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

temperature

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

Humidity 5% to 95% Storage Humidity 5% 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 100,000 hours at 25°C ambient condition.

AC Adapter 65 Watt nPFC Dimensions (H x W x D) Standard USB type C® Straight 1.8 m

90.0 x 51 x 28.5 mm unit: 250 g +/- 10 g

Weight

Not including power cord. Power cord varies by country

Input Input Efficiency 81.5% min at 115 Vac/ 230Vac @ 5V/3A 86.7% min at 115 Vac/ 230Vac @ 9V/3A 88% min at 115 Vac/ 230Vac @ 12V/5A 89% min at 115 Vac/ 230Vac @ 15V/4.33A 89% min at 115 Vac/ 230Vac @ 20V/3.25A



Technical Specifications

Input frequency range 47 ~ 63 Hz

Input AC current 1.6 A at 90 VAC and maximum load

Output Output power 65 W

DC output 5V/9V/12V/15V/20V **Hold-up time** 5ms at 115 Vac input

Output current limit <8.0 A Max.

Connector USB type C®

Environmental Design Operating

temperature 32°F to 95°F (0° to 35°C)

Non-operating (storage)

temperature -4°F to 185°F (-20° to 85°C) **Altitude** 0 to 16,400 ft (0 to 5000m)

AC Adapter 65 Watt Smart Dimensions (H x W x D)

nPFC EM Barrel 4.5 mm New EM

Weight

102 x 55 x 30 mm unit: 250 g +/- 10 g

Not including power cord. Power cord varies by country

Input Input Efficiency 88.0 % at 115 Vac and 89.0 % at 230Vac

Input frequency range 47 ~ 63 Hz

Input AC current Max. 1.7 A at 90 Vac

Output Output power 65 W

DC output 19.5 V

Hold-up time 5ms at 115 Vac input

Output current limit <11.0A

Connector 4.5 mm Barrel Type

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)

Humidity20% to 95%Storage Humidity10% to 95%

EMI and Safety*CE Mark - full compliance with LVD and EMC directives
*Worldwide safety standards - IEC60950, EN60950, UL

 * Worldwide safety standards - IEC60950, EN60950, UL60950, Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55022 Class B,

FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE.

* MTBF - over 200,000 hours at 25°C ambient condition.



Technical Specifications

AC Adapter 65 Watt Smart nPFC Standard Barrel 4.5 mm Right Angle 1.8 m

Dimensions (H x W x D) 90.0 x 51 x 28.5 mm

Weight unit: 230 q +/- 10 q Not including power cord. Power cord varies by country

Input **Input Efficiency** 88.0 % at 115 Vac and 89.0 % at 230 Vac

> Input frequency range 47 ~ 63 Hz

Input AC current Max. 1.7 A at 90 Vac

Output **Output power** 65 W

> DC output 19.5 V

Hold-up time 5ms at 115 Vac input

Output current limit <11.0 A

Connector 4.5 mm Barrel Type

Environmental Design Operating

32°F to 95°F (0° to 35°C) temperature

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.

Battery CC 3 Cell WHr 53 Long Life -PL Fast Charge Dimensions (H x W x D)

7.0 x 66.5 x 276.3 (0.275 x 2.618 x 10.877 inch)

Weight

0.215g (0.47 lb)

Cells/Type

3cell Lithium-Ion Polymer cell / 615383

Energy

Voltage 11.55 V

Amp-hour capacity

4.85 Ah

Watt-hour capacity

56 Wh

Temperature

32° to 113° F (0° to 45° C) Operating (Charging)

Operating (Discharging) 32° to 122° F (0° to 50° C)

Warranty

Depends on system offering

Optional Travel Battery

No

Available



HP EliteBook 850 G7 Notebook PC

QuickSpecs

Technical Specifications

Country of Origin

China



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

	Barrier to the control of the contro	D. IN also
Type Cases	Description	Part Number
cases	HP Business Backpack (up to 17.3")	2SC67AA
	HP Business Case (up to 15.6")	2SC66AA H2W17AA
	HP Essential Top Load Case (up to 15.6")	nzwi/AA
Docking	HP Thunderbolt Dock 120W G2	2UK37AA
	HP Thunderbolt Dock 230W G2	2UK38AA
	HP Thunderbolt Dock 120W G2 TAA	2UK37AA
	HP TB Dock Audio Module	3AQ21AA
	HP TB Dock 120W G2 cable	3XB94AA
	HP TB Dock G2 combo cable	3XB96AA
	HP USB-C Mini Dock	1PM64AA
	HP USB-C Dock G5	5TW10AA
	HP USB-C/A Universal Dock G2	5TW13AA
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 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 Wireless Premium Mouse	1JR31AA
	HP USB Premium Mouse	1JR32AA
	HP Essential USB Mouse	2TX37AA
	HP Elite Presenter Mouse	2CE30AA
	HP Bluetooth Travel Mouse	6SP30AA
	HP Stereo 3.5mm Headset	T1A66AA
	HP Stereo USB Headset	T1A67AA
	HP UC Wireless Mono Headset	W3K08AA
	HP UC Wireless Duo Headset	W3K09AA
	HP USB-C to USB-A Hub	Z6A00AA
	HP USB-C to DP	N9K78AA
	HP USB-C to VGA	N9K76AA
	HP HDMI to VGA	H4F02AA
	HP USB-C to HDMI 2.0 Adapter	1WC36AA
	HP USB-C to RJ45 Adapter	V7W66AA
	HP USB-C Travel Hub G2	7PJ38AA
	HP Elite USB-C Hub	4WX89AA



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

_		
Power	HP 65W Slim AC Adapter	H6Y82AA
	HP 45W Smart AC Adapter	H6Y88A
	HP 65W Smart AC Adapter	H6Y89AA
	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
	HP 65W USB-C Slim Power Adapter	3PN48AA
	HP Notebook Power Bank	N9F71AA
	HP USB-C Notebook Power Bank	1TZ86AA
Storage	HP USB External DVDRW Drive	F2B56AA
Jiorage		
	HP 1TB TLC PCI-e 3x4 NVMe M.2 SSD (2280)	6SK99AA
	HP 2TB TLC PCI-e 3x4 NVMe M.2 SSD (2280)	6SL00AA
Memory	HP 4 GB 2666 Mhz DDR4	4VN05AA
	HP 8 GB 2666 Mhz DDR4	4VN06AA
	HP 16 GB 2666 Mhz DDR4	4VN07AA
Security	HP Nano Keyed Cable Lock	1AJ39AA
•	HP Nano Dual-Head Keyed Cable Lock	1AJ41AA
	HP Sure Key Cable Lock	6UW42AA
WWAN	HP XMMT 7360 LTE WWAN	3FB01AA
	THE PARTY IS NOT THE PARTY IN T	51 50 1717



HP EliteBook 850 G7 Notebook PC

QuickSpecs

Change Log

Date of change:	Version History:		Description of change:
	From V1 to V2	Update	Overview

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