Overview

HP 255 G8 Notebook PC



- . Internal dual digital microphone
- 2. Webcam LED
- 3. Webcam
- 4. Touchpad
- 5. Touchpad buttons
- 6. Audio combo jack
 - 1. SuperSpeed USB 20Gbps is not available.

- 7. Power indicator LED
- 8. Hard drive indicator LED
- 9. SuperSpeed USB Type-C® 5Gbps signaling rate port (Data Transfer Only)
- 10. HDMI Port (Cable sold separately)
- 11. RJ-45 / Ethernet port
- 12. Power button



Overview



Right

- 1. AC Smart Pin Adapter Plug
- 2. SuperSpeed USB Type-A 5Gbps signaling rate port
 - 1. SuperSpeed USB 20Gbps is not available.
- 3. SuperSpeed USB Type-A 5Gbps signaling rate port
- 4. SD Card slot
- 5. Fingerprint Reader (Select models)



Overview

At a Glance

- A new compact narrow bezel design with thinner & lighter chassis
- Preinstall with Windows 10 versions or FreeDOS
- Choice of AMD Ryzen™, Athlon™ and AMD APU processors
- Choice of 39.62 cm (15.6") diagonal HD and FHD SVA Anti-Glare WLED or FHD IPS Anti-Glare WLED
- Choice of Integrated AMD Radeon™ Vega Graphics or Radeon™ Graphics
- Security features including Firmware TPM 2.0 and Fingerprint Reader (selected models)
- Weight starting at 3.84 lbs (1.74 kgs)
- MM18 Battery life up to 10 hours and 15 minutes ¹
- Wireless LAN (WLAN) up to 802.11ac or 802.11ax to keep you connected
- One SuperSpeed USB Type-C® 5Gbps signaling rate² (Data Transfer Only), Two SuperSpeed USB Type-A 5Gbps signaling rate²
- Choice of Solid State Drives up to 1 TB and Hard Drive up to 2 TB
- Dual channel DDR4 SODIMM memory up to 16 GB
- HP webcam with dual digital microphone and HD (supporting WDR- Wide Dynamic Range) or VGA camera
- Designed to support HP docking options including HP USB-C/A Universal Dock G2
- 1. Windows 10 MM18 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.
- 2. SuperSpeed USB Type-A 5Gbps signaling rate

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



Technical Specifications

PRODUCT NAME

HP 255 G8 Notebook PC

OPERATING SYSTEMS

Preinstalled Windows 10 Pro 64 – HP recommends Windows 10 Pro ¹

Windows 10 Pro 64 (National Academic only) ²

Windows 10 Home 64 1

Windows 10 Home Single Language 64 ¹

FreeDOS

- 1. Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.
- 2. Some devices for academic use will automatically be updated to Windows 10 Pro Education with the Windows 10 Anniversary Update. Features vary; see https://aka.ms/ProEducation for Windows 10 Pro Education feature information.

Supported Version

HP tested Windows 10, version 1809 on this platform For testing information on newer versions of Windows 10, please see: https://support.hp.com/document/c05195282.

PROCESSORS

AMD Ryzen™ 5 3500U APU with Radeon™ Vega 8 Mobile Graphics (2.1 GHz base frequency, up to 3.7 GHz burst frequency, 4 MB cache, 4 cores) ^{3,4,5}

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

AMD Ryzen™ 3 3250U APU with Radeon™ Graphics (2.6 GHz base frequency, up to 3.5 GHz burst frequency, 4 MB cache, 2 cores) ^{3,4,5}

AMD Athlon™ Gold 3150U APU with Radeon™ Graphics (2.4 GHz base frequency, up to 3.3 GHz burst frequency, 4 MB cache, 2 cores) ^{3,4,5}

AMD Athlon™ Silver 3050U APU with Radeon™ Graphics (2.3 GHz base frequency, up to 3.2 GHz burst frequency, 4 MB cache, 2 cores) ^{3,4,5}

AMD 3020e APU with Radeon™ Graphics (1.2 GHz base frequency, up to 2.6 GHz burst frequency, 4 MB cache, 2 cores) ^{3,4,5} AMD Ryzen™ 3 5300U APU with AMD Radeon™ Graphics (2.6 GHz base frequency, up to 3.8 GHz burst frequency, 4 MB cache, 4 cores) ^{3,4,5}

AMD Ryzen™ 5 5500U APU with AMD Radeon™ Graphics (2.1 GHz base frequency, up to 4.0 GHz burst frequency, 8 MB cache, 6 cores) ^{3,4,5}

AMD Ryzen™ 7 5700U APU with AMD Radeon™ Graphics (1.8 GHz base frequency, up to 4.3 GHz burst frequency, 8MB cache, 8cores) ^{3,4,5}

AMD Ryzen™ 3 3200U APU with Radeon™ Vega 3 Graphics (2.6 GHz base frequency, up to 3.5 GHz burst frequency, 4MB cache, 2 cores) ^{3,4,5}



Technical Specifications

Processors Family

AMD Ryzen™ 7 Mobile Processors ⁶
AMD Ryzen™ 5 Mobile Processors ⁶
AMD Ryzen™ 3 Mobile Processors ⁶
AMD Athlon™ Mobile Processors ⁶
AMD APU processor ⁶

- 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. AMD Max Boost frequency performance varies depending on hardware, software and overall system configuration.
 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

AMD Radeon™ Vega 8 Mobile Graphics AMD Radeon™ Vega 6 Mobile Graphics AMD Radeon™ Vega 3 Mobile Graphics AMD Radeon™ Graphics

Supports

Support HD decode, DX12, HDMI 1.4b 7

7. HD content required to view HD images.

DISPLAYS

Non-Touch

39.6 cm (15.6") diagonal, HD (1366 x 768), SVA, Anti-Glare WLED, 250nits, eDP micro-edge, 45% NTSC ^{7,8,9} 39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, Anti-Glare WLED, 250nits eDP micro-edge, 45% NTSC ^{7,8,9} 39.6 cm (15.6") diagonal, FHD (1920 x 1080), SVA, Anti-Glare WLED, 250nits eDP micro-edge, 45% NTSC ^{7,8,9}

HDMI

Port supports resolutions up to 1920 x 1080 external resolution @60 Hz

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



Technical Specifications

STORAGE AND DRIVES

Primary Storage

2 TB 5400 rpm SATA ¹⁰
1 TB 5400 rpm SATA ¹⁰
500 GB 7200 rpm SATA ¹⁰
500 GB 5400 rpm SATA ¹⁰

Primary M.2 Storage

128 GB M.2 SATA-3 TLC Solid State Drive ¹⁰
128 GB PCle® NVMe™ TLC Solid State Drive ¹⁰
256 GB PCle® NVMe™ M.2 Value Solid State Drive ¹⁰
512 GB PCle® NVMe™ M.2 Value Solid State Drive ¹⁰
1TB PCle® NVMe™ M.2 Value Solid State Drive ¹⁰

Dual Storage

128 GB M.2 SATA-3 TLC Solid State Drive + 1TB 5400rpm SATA ¹⁰
128 GB PCle® NVMe™ TLC Solid State Drive + 1 TB 5400rpm SATA ¹⁰
256 GB PCle® NVMe™ M.2 Value Solid State Drive + 1TB 5400rpm SATA ¹⁰

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

16 GB DDR4-3200 SDRAM11

Memory

16 GB DDR4-3200 SDRAM (2 X 8 GB) ¹¹
16 GB DDR4-2400 SDRAM (2 X 8 GB) ¹¹
12 GB DDR4-3200 SDRAM (4 GB (1 x 4GB) and 8 GB (1 x 8 GB)) ¹¹
12 GB DDR4-2400 SDRAM (4 GB (1 x 4GB) and 8 GB (1 x 8 GB)) ¹¹
8 GB DDR4-3200 SDRAM (2 x 4 GB) ¹¹
8 GB DDR4-2400 SDRAM (2 x 4 GB) ¹¹
8 GB DDR4-3200 SDRAM (1 x 8 GB) ¹¹
8 GB DDR4-3200 SDRAM (1 x 8 GB) ¹¹
4 GB DDR4-3200 SDRAM (1 x 4 GB) ¹¹
4 GB DDR4-3200 SDRAM (1 x 4 GB) ¹¹

Memory Slots

2 SODIMM (select models)
Support Dual Channel Memory

1 SODIMM



Technical Specifications

Support Single Channel Memory

NOTE: All slots are customer non-accessible / non-upgradeable

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

Realtek RTL8822CE 802.11ac 2x2 Wi-Fi® + Bluetooth® 5 ¹²
Realtek RTL8822CE 802.11a/b/g/n/ac (1x1) Wi-Fi® with Bluetooth® 4.2 Combo ¹²
Intel® Dual Band Wi-Fi 6 AX201 802.11a/b/g/n/ac/ax (2x2) WLAN and Bluetooth® 5 Combo, non-vPro® ¹³

Miracast

Compatible with Miracast-certified devices (For Win10) 14

Ethernet

Realtek 10/100/1000 GbE NIC 15

- 12. Wi-Fi supporting gigabit speeds (802.11ac) is achievable when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 160MHz channels.
- 13. 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.
- 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.



Technical Specifications

AUDIO/MULTIMEDIA

Audio

2 Integrated stereo speakers Integrated dual digital microphone

Camera

HP TrueVision HD Camera 7,8

Webcam

VGA webcam 8

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

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

Keyboard

Full Size Textured island-style Keyboard

Pointing Device

Touchpad with multi-touch gesture support (PTP certified)

Function Keys

- F1 Open " How to get help in Windows 10" webpage
- F2 Brightness Down
- F3 Brightness Up
- F4 Display Switching
- F5 Blank
- F6 Mute
- F7 Volume Down
- F8 -Volume Up
- F9 Previous
- F10 Play/Pause
- F11 Next
- F12 Airplane mode



Technical Specifications

SOFTWARE AND SECURITY

Preinstalled Software

Software HP Support Assistant ¹⁶

Native Miracast Support 17

HP documentation

HP Setup Integrated 00BE

HP SSRM

HP Audio Switch

HP JumpStarts

McAfee LiveSafe™ 15

Xerox® DocuShare® 30 day free trial offer25

HP QuickDrop

Security Management

Firmware TPM 2.0 18

Fingerprint reader (Select models)

- 15. 30 days free trial
- 16. HP Support Assistant requires Windows and Internet access.
- 17. Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.
- 18. Firmware TPM is version 2.0. which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT)
- 25. Simply sign up and start using Xerox® DocuShare® Go. No credit card. No obligation. Data will become unavailable unless a subscription is entered before the end of the 30-day free trial period. See visit http://www.xerox.com/docusharego for details.

POWER

Power Supply

HP Smart 65 W EM External AC power adapter ¹⁹ HP Smart 45 W External AC power adapter ¹⁹

Primary Battery

HP Long Life 3-cell, 41 Wh Li-ion (Polymer) 20

Power Cord

1m (3.28 feet) length power cord

MM18 Battery life

Up to 10 hours and 15 minutes 21

Battery Weight

 $0.19 \, kg$

0.42 lb



Technical Specifications

- 19. Availability may vary by country.
- 20. Battery is internal and not replaceable by customer. Serviceable by warranty.
- 21. Windows 10 MM18 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

Product Weight 22

Starting at 3.84 lb Starting at 1.74 kg

Product Dimensions (w x d x h)

14.09 x 9.53 x 0.78 in 35.8 x 24.2 x 1.99 cm

22. Weight will vary by configuration. Does not include power adapter.

PORTS/SLOTS

Ports

2 SuperSpeed USB Type-A 5Gbps signaling rate²³

1 SuperSpeed USB Type-C[®] 5Gbps signaling rate²³ (Data Transfer Only)

1 HDMI v1.4b ²⁴

1 RJ-45

1 AC Power

1 Headphone/microphone combo jack

Expansion Slots

Support SD/SDHC/SDXC

1 Multi-format digital media reader

23. SuperSpeed USB 20Gbps is not available

24. HDMI cable sold separately.



Technical Specifications

SERVICE AND SUPPORT

1-year limited warranty and 90 day software limited warranty options depending on country. Batteries have a default one year limited warranty. 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.25

25. 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)

Nominal Operating Voltage 19.5 V Average Operating Power 4.1W

Integrated graphics PCO - AMD Radeon Vega 8 Graphics

Dali - AMD Radeon Graphics N/A (Switchable graphics design)

Max Operating Power UMA < 45W

Temperature

Discrete Graphics

Operating

32° to 95° F (0° to 35° C) (not writing optical)
41° to 95° F (5° to 35° C) (writing optical)

Non-operating -4° to 140° F (-20° to 60° C)

Relative Humidity

Operating 10% to 90%, non-condensing

Non-operating 5% to 95%

Shock

Operating 40 G, 2 ms duration, half-sine Non-operating 240 G, 2 ms duration, half-sine

Random Vibration

Operating 1.043 grms
Non-operating 3.5 grms

Altitude (unpressurized)

Operating -15 m to 3048 m (-50 ft to 10000 ft) Non-operating -15 m to 12192 m (-50 ft to 40000 ft)

Planned Industry Standard Certifications

Yes UL No CSA Yes FCC Compliance Yes **ENERGY STAR®** Yes **EPEAT®** Yes **ICES** Yes Australia / Yes NZ A - Tick Compliance CCC Yes Yes Japan VCCI Compliance KC Yes **BSMI** Yes Yes **CE Marketing Compliance BNCI or BELUS** Yes CIT Yes Yes GOST Yes Saudi Arabian Compliance (ICCP) **SABS** Yes



UKRSERTCOMPUTER

Yes

Technical Specifications

DISPLAYS

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

Panel LCD 15.6 inch FHD (1920x1080) Anti-Glare WLED UWVA 45percent cg 250nits eDP 1.2 w/o PSR slim NWBZ **Outline Dimensions (W x H x D)** 350.96 x 216.75 (max.) x 3.2 (max.) mm

Active Area 344.16 x 193.59 mm

Weight 370g max.

Diagonal Size 15.6"

Surface Treatment AG

Touch enabled None

Contrast Ratio 600:1 (typ.)

Refresh Rate 60Hz

Brightness 250nits typ.

Pixel Resolution

Configuration1920 x 1080 (FHD)InterfaceeDP 1.2 w/o PSRLCD ModeIPS/PLS/AHVA

PPI 142

Viewing Angle UWVA 85/85/85

Panel LCD 15.6-in FHD (1920x1080) Anti-Glare WLED SVA 45percent cg 250nits eDP 1.2 w/o PSR NWBZ ultraslim **Outline Dimensions (W x H x D)** 350.96 x 216.75 (max.) x 3.2 (max.) mm

Active Area 344.16 x 193.59 mm

Weight 360g max.

Diagonal Size 15.6"

Surface Treatment AG

Touch enabled None

Contrast Ratio 300:1 (typ.)

Refresh Rate 60Hz

Brightness 250nits typ.

Pixel Resolution

Configuration 1920 x 1080 (FHD) **Interface** eDP 1.2 w/o PSR

LCD Mode TN PPI 142

Viewing Angle UWVA 45/45/15/35



Technical Specifications

Panel LCD 15.6-in HD (1366x768) Anti-Glare WLED SVA 45percent cg 250nits eDP 1.2 w/o PSR NWBZ ultraslim **Outline Dimensions (W x H x D)** 351.03 x 216.75 (max.) x 3.2 (max.) mm

Active Area 344.23 x 193.54 mm

Weight 360g max.

Diagonal Size 15.6"

Surface Treatment AG

Touch enabled None

Contrast Ratio 300:1 (typ.)

Refresh Rate 60Hz

Brightness 250nits typ.

Pixel Resolution

Configuration1366 x 768 (HD)InterfaceeDP 1.2 w/o PSR

LCD Mode TN PPI 101

Viewing Angle UWVA 40/40/15/30



Technical Specifications

STORAGE AND DRIVES*

* 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.

HDD 1TB 5400RPM 7mm SATA (HDD 1TB 5400RPM 2.5in) **Drive Weight** 0.21 lbs (95 g)

Capacity 1TB

 Height
 0.28 in (7 mm)

 Width
 2.75 in (69.85 mm)

 Interface
 ATA-8, SATA 3.0

Performance

Maximum Sequential ReadUp to 100 MB/sMaximum Sequential WriteUp to 100 MB/sLogical Blocks1,953,525,168

Operating Temperature 32° to 140° F (0° to 60° C) [case temp]

Features S.M.A.R.T., NCQ, Ultra DMA

HDD 2TB 5400RPM 7mm SATA 2.5in (HDD 2TB 5400RPM SATA 2.5in 2nd) **Drive Weight** 0.21 lbs (95 g)

Capacity 2TB

 Height
 Up to 128MB

 Width
 0.28 in (7 mm)

 Interface
 2.75 in (69.85 mm)

Performance

Maximum Sequential ReadUp to 100 MB/sMaximum Sequential WriteUp to 100 MB/sLogical Blocks3,907,029,168

Operating Temperature 32° to 140° F (0° to 60° C) [case temp]

Features S.M.A.R.T., NCQ, Ultra DMA

HDD 500GB 5400RPM 7mm SATA **Drive Weight** 0.21 lbs (95 g)

Capacity 500GB

 Height
 0.28 in (7 mm)

 Width
 2.75 in (69.85 mm)

 Interface
 ATA-8, SATA 3.0

Performance

Maximum Sequential ReadUp to 100 MB/sMaximum Sequential WriteUp to 100 MB/sLogical Blocks976,773,168

Operating Temperature 32° to 140° F (0° to 60° C) [case temp]

Features S.M.A.R.T., NCQ, Ultra DMA



Technical Specifications

HDD 500GB 7200RPM 7mm SATA (HDD 500GB 7200RPM 2.5in)

Drive Weight 0.21 lbs (95 q)

Capacity 500GB

Height 0.28 in (7 mm) Width 2.75 in (69.85 mm) Interface ATA-8. SATA 3.0

Performance

Maximum Sequential Read Up to 120 MB/s **Maximum Sequential Write** Up to 120 MB/s **Logical Blocks** 976,773,168

Operating Temperature 32° to 140° F (0° to 60° C) [case temp]

Features S.M.A.R.T., NCQ, Ultra DMA

SSD 128GB 2280 M2 SATA-3 Drive Weight TLC (SSD 128GB 2280 M2 SATA-3 TLC)

0.01 lb (6 q) ~ 0.02 lb (10 q)

Capacity 128 GB

Height 0.09 in (2.3 mm) Width 0.87 in (22 mm) Interface **ATA-8, SATA 3.0**

Performance

Maximum Sequential Read Up to 500 MB/s **Maximum Sequential Write** Up to 400MB/s **Logical Blocks** 250,069,680

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

Features DIPM; TRIM; DEVSLP

SSD 1TB 2280 PCIe NVMe Value (SSD 1TB 2280 PCIe **NVMe Value)**

Drive Weight 0.01 lb (6 q) ~ 0.02 lb (10 q)

Capacity 1TB

Height 0.09 in (2.3 mm) Width 0.87 in (22 mm) Interface PCIe NVMe Gen3X2

Performance

Maximum Sequential Read Up to 1500MB/s **Maximum Sequential Write** Up to 750MB/s **Logical Blocks** 2,000,409,264

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

Features TRIM, L1.2



Technical Specifications

SSD 256GB 2280 PCIe NVMe Drive Weight
Value (SSD 256GB 2280
PCIe NVMe Value)

Capacity

Drive Weight 0.01 lb (6 g) \sim 0.02 lb (10 g)

Capacity 256GB

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Interface
 PCIe NVMe Gen3X2

Performance

Maximum Sequential ReadUp to 1500MB/sMaximum Sequential WriteUp to 750MB/sLogical Blocks500,118,192

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

Features TRIM, L1.2

SSD 512GB 2280 PCIe NVMe Drive Weight Value (SSD 512GB 2280 Capacity PCIe NVMe Value)

Drive Weight 0.01 lb (6 g) ~ 0.02 lb (10 g)

Capacity 512GB

 Height
 0.09 in (2.3 mm)

 Width
 0.87 in (22 mm)

 Interface
 PCIe NVMe Gen3X2

Performance

Maximum Sequential ReadUp to 1500MB/sMaximum Sequential WriteUp to 750MB/sLogical Blocks1,000,215,216

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

Features TRIM, L1.2



Technical Specifications

NETWORKING/COMMUNICATIONS

Intel® Wi-Fi 6 AX201 + Bluetooth® 5 (802.11ax 2x2, non-vPro®, supporting gigabit file transfer speeds) non-vPro®1,2 Wireless LAN Standards IEEE 802.11a

IEEE 802.11b
IEEE 802.11g
IEEE 802.11n
IEEE 802.11ac
IEEE 802.11ax
IEEE 802.11d
IEEE 802.11b
IEEE 802.11h
IEEE 802.11h
IEEE 802.11i
IEEE 802.11k
IEEE 802.11r

IEEE 802.11v

Interoperability

Features Wi-Fi® 6 technology

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 &

I 6UMHZ)

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 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 certificationIEEE 802.11i

WAPI

Network Architecture

Models

Ad-hoc (Peer to Peer)

Infrastructure (Access Point Required)

Roaming

IEEE 802.11 compliant roaming between access points

Output Power⁴

• 802.11b: +18.5dBm minimum

• 802.11g: +17.5dBm minimum

• 802.11a: +18.5dBm minimum



Technical Specifications

802.11n HT20(2.4GHz): +15.5dBm minimum
802.11n HT40(2.4GHz): +14.5dBm minimum
802.11n HT20(5GHz): +15.5dBm minimum
802.11n HT40(5GHz): +14.5dBm minimum
802.11ac VHT80(5GHz): +11.5dBm minimum
802.11ac VHT160(5GHz): +11.5dBm minimum
802.11ax HT40(2.4GHz): +10dBm minimum
802.11ax VHT160(5GHz): +10dBm minimum

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 Sensitivity⁵

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
 802.11ax, 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 Off - Radio ON



Technical Specifications

- 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.
- 2. Wi-Fi supporting gigabit speeds is achievable when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 160MHz channels.
- 3. Check latest software/driver release for updates on supported security features.
- 4. 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.
- 5. 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).

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 rate⁶ 2.17 Mbps

BLE: 1 Mbps signaling data rate⁶ 0.2 Mbps

6. Actual throughput may vary.

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

channels

Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps

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

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.



Technical Specifications

Realtek 802.11a/b/g/n/ac (1x1) Wi-Fi® and Bluetooth® 4.2 Combo¹ Wireless LAN Standards

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

Interoperability

Wi-Fi certified modules

Frequency Band

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

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, and 80MHz)

Modulation

Direct Sequence Spread Spectrum

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

Security²

• 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

Ad-hoc (Peer to Peer)

Infrastructure (Access Point Required)

Roaming

IEEE 802.11 compliant roaming between access points

Output Power³

802.11b: +14dBm minimum802.11g: +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



Technical Specifications

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

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

• 802.11ac, MCS9: -59dBm maximum

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

Dimensions Type 2230 : 2.3 x 22.0 x 30.0 mm

 Weight
 Type 2230 : 2.8g

 Operating Voltage
 3.3v +/- 9%

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

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

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

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

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 Off - Radio ON

- Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 5 (802.11 ac) is backwards compatible with prior 802.11 specs.
- 2. Check latest software/driver release for updates on supported security features.
- 3. 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.
- 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

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

Bluetooth Specification 4.0/4.1/4.2 Compliant **Frequency Band** 2402 to 2480 MHz

Number of Available

Channels

Legacy: 0~79 (1 MHz/CH)BLE: 0~39 (2 MHz/CH)

Data Rates andLegacy: 3 Mbps data rate; throughput up to 2.17 Mbps **Throughput**BLE: 1 Mbps data rate; throughput up to 0.2 Mbps

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

channels

Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps

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

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

a maximum transmit power of + 4 dBm for BR and EDR.



Technical Specifications

Realtek RTL8822CE 802.11ac 2x2 Wi-Fi®+ Bluetooth® 5¹ Wireless LAN Standards IEEE 802.11a

IEEE 802.11b
IEEE 802.11g
IEEE 802.11n
IEEE 802.11ac
IEEE 802.11d
IEEE 802.11d
IEEE 802.11h
IEEE 802.11h
IEEE 802.11i
IEEE 802.11k

Interoperability

Wi-Fi certified modules

Frequency Band

802.11b/g/n

IEEE 802.11r IEEE 802.11v

• 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

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, and 80MHz)

Modulation

Direct Sequence Spread Spectrum

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

Security²

• 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

Ad-hoc (Peer to Peer)

Infrastructure (Access Point Required)

Roaming

IEEE 802.11 compliant roaming between access points

Output Power³

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

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

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

• 802.11ac, MCS9: -59dBm maximum

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

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 : 2.8g

2. Type 126: 1.3g

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 Off – Radio ON

 Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 5 (802.11 ac) is backwards compatible with prior 802.11 specs.

2. Check latest software/driver release for updates on supported security features.

3. 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.

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

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

Bluetooth Specification 4.0/4.1/4.2/5.0 Compliant

Frequency Band 2402 to 2480 MHz

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

Data Rates andLegacy: 3 Mbps data rate; throughput up to 2.17 Mbps **Throughput**BLE: 1 Mbps data rate; throughput up to 0.2 Mbps

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

channels

Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps

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

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

a maximum transmit power of + 4 dBm for BR and EDR.



87.74 % at 115 Vac and 88.4 % at 230Vac

QuickSpecs

Technical Specifications

POWER

AC Adapter 45 Watt Smart Dimensions (H x W x D)
nPFC Standard Barrel

nPFC Standard Barrel 4.5mm Right Angle 1.8m

Dimensions (H x W x D) 95.0x40.0x26.5mm **Weight** unit: 200q +/- 10q

Input Input Efficiency

Input frequency range 47 ~ 63 Hz

Input AC current Max. 1.4 A at 90 Vac

Output Output power 45W

DC output 19.5V

Hold-up time 5ms at 115 Vac input

Output current limit <8.0A

Connector C6 (3pin/with grounded, with Smart ID DC connector)

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 5,000 m)

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 Smart Dimensions nPFC EM Barrel 4.5mm

New EM

Dimensions 102x55x30mm

Weight unit: 250g +/- 10g

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 65W

DC output 19.5V

Hold-up time 5ms at 115 Vac input

Output current limit <11.0A

Connector C6 (3pin/with grounded, with Smart ID DC connector)

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)



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.

Battery HW 3 Cell WHr 41 Long Life -PR+PL Fast Charge (Not Linked) **Dimensions** 6.0mm x 186.85mm x 90.2mm

Weight 192g

Cells/Type 3cell Lithium-Ion Prismatic cell / 496080

Energy Voltage 11.55V

Amp-hour capacity 3615mAh Watt-hour capacity 41Wh

Temperature Operating (Charging) 0°C ~ 45°C

Operating (Discharging) -10°C ~ 60°C

Fuel Gauge LED N/A

Warranty 1000 cycles > 65% (at 23°C)

Optional Travel Battery

Available

Nο

FINGERPRINT READER

Model Elan eFSA80ST touch sensor

Mobile Voltage Operation 2.65V to 3.6V

Operating Temperature: 32° to 95° F (0° to 35° C)

Current Consumption Image:50mA peakLow Latency Wait For Finger<900 uA</th>Capture Rate: Image transmitter output frequency20cm/sec

ESD Resistance IEC 61000-4-2 (+15KV)

Detection Matrix 508 dpi / 4x4mm sensor area

FRR (False Reject Rate) / FAR (False Acceptance Rate) FRR ~ 2% @ 1:50K FAR

Country of Origin

China



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

Туре	Description	Part Number
Cases	HP Prelude Pro Top Load	1X645AA
	HP Prelude Pro Backpack	1X644AA
	HP Prelude Top Load 15.6	1E7D7AA
	HP Prelude Backpack 15.6	1E7D6AA
Docking	HP USB-C®/A Universal Dock G2	5TW13AA
	HP 4.5 mm and USB-C® Dock Adapter G2	6LX61AA
Input/Output	HP USB Essential Keyboard/Mouse	H6L29AA
	HP Wired Desktop 320MK Mouse and Keyboard	9SR36AA
	HP Slim Wireless Keyboard & Mouse	T6L04AA
	HP Wired Desktop 320K Keyboard	9SR37AA
	HP Slim Wireless Keyboard (Link-5)	T6U20AA
	HP 3-Button USB Laser Mouse	H4B81AA
	HP Essential USB Mouse	2TX37AA
	HP USB Travel Mouse	G1K28AA
	HP Bluetooth Travel Mouse	6SP30AA
	HP Comfort Grip Wireless Mouse	H2L63AA
	HP Wired Desktop 320M Mouse	9VA80AA
	HP HDMI to VGA Adapter	H4F02AA
	HP HDMI to DVI	F5A28AA
Power	HP 45W Smart AC Adapter	H6Y88AA
	HP 65W Smart AC Adapter	H6Y89AA
	HP 65W Slim Adapters (w/ detachable DC cable + TIPS)	H6Y82AA
Storage	HP External USB Optical Drive	F2B56AA
Memory	HP 4GB DDR4 3200 Memory	286H5AA
	HP 8GB DDR4 3200 Memory	286H8AA



Summary of Changes

Date of change:	Version History:		Description of change:	
December14, 2020	From V1 to V2	Update	USB Information	
February 25, 2021	From V2 to V3	Update	Xerox DocuShare offer value	
March 2, 2021	From V3 to V4	Add	Fingerprint reader Spec and updates System Unit and At a Glance	
April 20, 2021	From V4 to V5	Update	TechSpecs/Memory Modules	
	From V5 to V6			

Copyright © 2021 HP Development Company, L.P. 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.

AMD and Radeon are trademarks of Advanced Micro Devices, Inc. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. All other trademarks are the property of their respective owners.

