Overview

HP 255 G8 Notebook PC

Left

1. Internal dual digital microphone
2. Webcam LED
3. Webcam

4. Touchpad
5. Touchpad buttons
6. Audio combo jack

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

1. SuperSpeed USB 20Gbps is not available.

Overview

Right

1.   AC Smart Pin Adapter Plug
2.   SuperSpeed USB Type-A 5Gbps signaling rate port

3.   SuperSpeed USB Type-A 5Gbps signaling rate port
4.   SD Card slot

1. SuperSpeed USB 20Gbps is not available.

QuickSpecs

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
- Weight starting at 3.84 lbs (1.74 kgs)
- MM18 Battery life up to 7 hours and 45 minutes [1]
- Wireless LAN (WLAN) up to 802.11ac or 802.11ax to keep you connected
- One SuperSpeed USB Type-C® 5Gbps signaling rate[2] (Data Transfer Only), Two SuperSpeed USB Type-A 5Gbps signaling rate[2]
- Choice of Solid State Drives up to 1 TB and Hard Drive up to 2 TB
- Fast and upgradeable dual channel DDR4 SODIMM memory up to 16 GB
- HP webcam with dual digital digital microphone and HD (supporting WDR- Wide Dynamic Range) or VGA camera

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 Windows10, 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, 1 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, 1 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, 1 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]

Processors Family
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.

Technical Specifications

CHIPSET

Chipset is integrated with processor

GRAPHICS

Integrated
AMD Radeon™ Vega 8 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]
256 GB PCIe® NVMe™ M.2 Value Solid State Drive [10]
512 GB PCIe® NVMe™ M.2 Value Solid State Drive [10]
1TB PCIe® NVMe™ M.2 Value Solid State Drive [10]

Dual Storage
128 GB M.2 SATA-3 TLC Solid State Drive + 1TB 5400rpm SATA [10]
256 GB PCIe® 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 DDR4-2400 SDRAM[11]

Memory
16 GB DDR4-2666 SDRAM (2 X 8 GB) [11]
12 GB DDR4-2666 SDRAM (4 GB (1 x 4GB) and 8 GB (1 x 8 GB)) [11]
8 GB DDR4-2400 SDRAM (2 x 4 GB) [11]
8 GB DDR4-2400 SDRAM (1 x 8 GB) [11]
8 GB DDR4-2400 SDRAM (1 x 4 GB) [11]

Memory Slots
2 SODIMM (AMD Ryzen™ / Athlon™ Mobile Processors)
All slots are customer non-accessible / non-upgradeable
Supports Dual Channel Memory
1 SODIMM

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.

Technical Specifications

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.

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.

Technical Specifications

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

SOFTWARE AND SECURITY

Preinstalled Software
Software
HP Support Assistant [16]
Native Miracast Support [17]
HP documentation
HP Setup Integrated OOBE
HP SSRM
HP Audio Switch
HP JumpStarts
McAfee LiveSafe™ [15]
Xerox® DocuShare® 90 day free trial offer[25]

Security Management
Firmware TPM 2.0 [18]

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 90 day free trial period. See visit www.xerox.com/docusharego for details.

Technical Specifications

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 [20]

Power Cord
1m (3.28 feet) length power cord

MM18 Battery life
Up to 7 hours and 45 minutes [21]

Battery Weight
0.19 kg
0.42 lb

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 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.

Technical Specifications

PORTS/SLOTS

Ports
2 SuperSpeed USB Type-A 5Gbps signaling rate[23]
1 SuperSpeed USB Type-C® 5Gbps signaling rate[23] (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.

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.

QuickSpecs

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
Discrete Graphics	N/A (Switchable graphics design)
Max Operating Power	UMA < 45W

Temperature

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

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

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	
Configuration	1920 x 1080 (FHD)
Interface	eDP 1.2 w/o PSR
LCD Mode	IPS/PLS/AHVA
PPI	142
Viewing Angle	UWVA 85/85/85/85

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	
	Configuration	1366 x 768 (HD)
	Interface	eDP 1.2 w/o PSR
	LCD Mode	TN
	PPI	101
	Viewing Angle	UWVA 40/40/15/30

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 Read	Up to 100 MB/s
	Maximum Sequential Write	Up to 100 MB/s
	Logical Blocks	1,953,525,168
	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 Read	Up to 100 MB/s
	Maximum Sequential Write	Up to 100 MB/s
	Logical Blocks	3,907,029,168
	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 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 Read	Up to 100 MB/s	
Maximum Sequential Write	Up to 100 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	

HDD 500GB 7200RPM 7mm SATA (HDD 500GB 7200RPM 2.5in)		
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 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 TLC (SSD 128GB 2280 M2 SATA-3 TLC)		
Drive Weight	0.01 lb (6 g) ~ 0.02 lb (10 g)	
Capacity	128 GB	
Height	0.09 in (2.3 mm)	
Width	0.87 in (22 mm)	
Interface	ATA-8, SATA 3.0	
Performance		
Maximum Sequential Read	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	

Technical Specifications

SSD 1TB 2280 PCIe NVMe Value (SSD 1TB 2280 PCIe NVMe Value)		
Drive Weight	0.01 lb (6 g) ~ 0.02 lb (10 g)
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

SSD 256GB 2280 PCIe NVMe Value (SSD 256GB 2280 PCIe NVMe Value)		
Drive Weight	0.01 lb (6 g) ~ 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 Read	Up to 1500MB/s
Maximum Sequential Write	Up to 750MB/s
Logical Blocks	500,118,192
Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]
Features	TRIM, L1.2

SSD 512GB 2280 PCIe NVMe Value (SSD 512GB 2280 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 Read	Up to 1500MB/s
Maximum Sequential Write	Up to 750MB/s
Logical Blocks	1,000,215,216
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 802.11e 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 & 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
	Security[3]	• 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	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	Roaming	IEEE 802.11 compliant roaming between access points
	Output Power[4]	• 802.11b: +18.5dBm minimum • 802.11g: +17.5dBm minimum • 802.11a: +18.5dBm minimum • 802.11n HT20(2.4GHz): +15.5dBm minimum • 802.11n HT40(2.4GHz): +14.5dBm minimum • 802.11n HT20(5GHz): +15.5dBm minimum • 802.11n HT40(5GHz): +14.5dBm minimum • 802.11ac VHT80(5GHz): +11.5dBm minimum • 802.11ac VHT160(5GHz): +11.5dBm minimum

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/Modern Standby: 10mW • Radio disabled: 8 mW	
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode	
Receiver Sensitivity[5]	• 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** **Non-operating**	14° to 158° F (−10° to 70° C) −40° to 176° F (−40° to 80° C)
Humidity	**Operating** **Non-operating**	10% to 90% (non-condensing) 5% to 95% (non-condensing)
Altitude	**Operating** **Non-operating**	0 to 10,000 ft (3,048 m) 0 to 50,000 ft (15,240 m)
LED Activity	LED Amber – Radio OFF LED Off – Radio ON	

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.
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.

Technical Specifications

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 Channels	Legacy: 0~79 (1 MHz/CH) BLE: 0~39 (2 MHz/CH)
Signaling Data Rate	Legacy: 3 Mbps signaling data rate[6] 2.17 Mbps BLE: 1 Mbps signaling data rate[6] 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.

Realtek 802.11a/b/g/n/ac (1x1) Wi-Fi® and Bluetooth® 4.2 Combo[1]	**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

Technical Specifications

Security[2]	• 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 Power[3]	• 802.11b : +14dBm minimum • 802.11g : +12dBm minimum • 802.11a : +12dBm minimum • 802.11n HT20(2.4GHz) : +12dBm minimum • 802.11n HT40(2.4GHz) : +12dBm minimum • 802.11n HT20(5GHz) : +10dBm minimum • 802.11n HT40(5GHz) : +10dBm minimum • 802.11ac VHT80(5GHz) : +10dBm minimum
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 Sensitivity[4]	• 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
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
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)
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

1. 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).

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

Bluetooth Specification	4.0/4.1/4.2 Compliant
Frequency Band	2402 to 2480 MHz
Number of Available Channels	Legacy : 0~79 (1 MHz/CH)BLE : 0~39 (2 MHz/CH)
Data Rates and Throughput	Legacy : 3 Mbps data rate; throughput up to 2.17 Mbps BLE : 1 Mbps data rate; throughput up to 0.2 Mbps Legacy : Synchronous Connection Oriented links up to 3, 64 kbps, voice channels Legacy : Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)
Transmit Power	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 4 dBm for BR and EDR.

Realtek RTL8822CE 802.11ac 2x2 Wi-Fi®+ Bluetooth® 5[1]	**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)

Technical Specifications

	• 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
Security[2]	• 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 Power[3]	• 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
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 Sensitivity[4]	• 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
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
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)

Technical Specifications

LED Activity	LED Amber – Radio OFF
	LED Off – Radio ON

1. 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).

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 Channels	Legacy : 0~79 (1 MHz/CH) BLE : 0~39 (2 MHz/CH)
Data Rates and Throughput	Legacy : 3 Mbps data rate; throughput up to 2.17 Mbps BLE : 1 Mbps data rate; throughput up to 0.2 Mbps Legacy : Synchronous Connection Oriented links up to 3, 64 kbps, voice channels Legacy : Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)
Transmit Power	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 4 dBm for BR and EDR.

QuickSpecs

Technical Specifications

POWER

AC Adapter 45 Watt Smart nPFC Standard Barrel 4.5mm Right Angle 1.8m	Dimensions (H x W x D)		95.0x40.0x26.5mm
	Weight		unit: 200g +/- 10g
	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	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 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 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 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 230Vac
		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 temperature	32°F to 95°F (0°to 35°C)
		Non-operating (storage) temperature	-4°F to 185°F (-20°to 85°C)
		Altitude	0 to 16,400 ft (0 to 5000m)
		Humidity	20% to 95%

Technical Specifications

	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	No	

Technical Specifications

Country of Origin

China

QuickSpecs

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

Type	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

Summary of Changes

Date of change:	Version History:		Description of change:
December14, 2020	From V1 to V2	Updated	USB Information

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