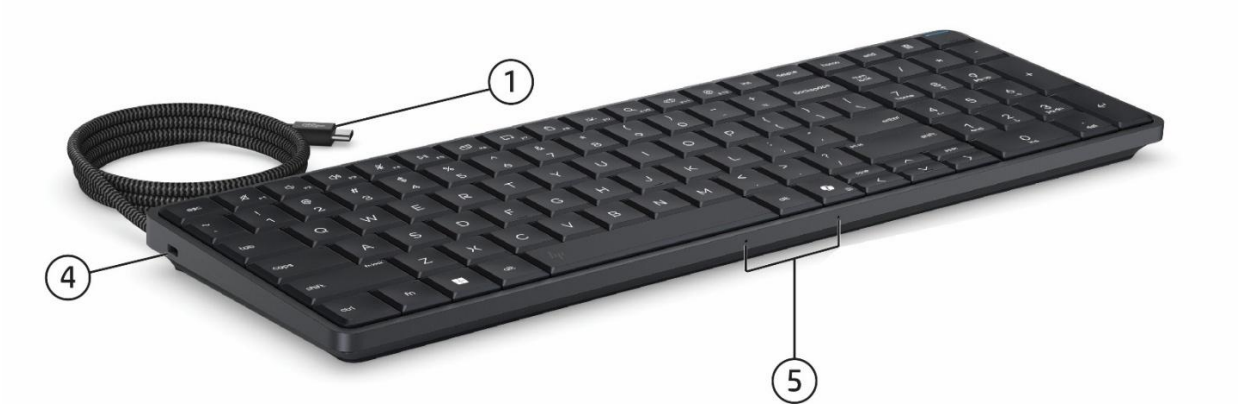
Overview

HP EliteBoard G1a Next Gen AI PC
(Attached Cable)



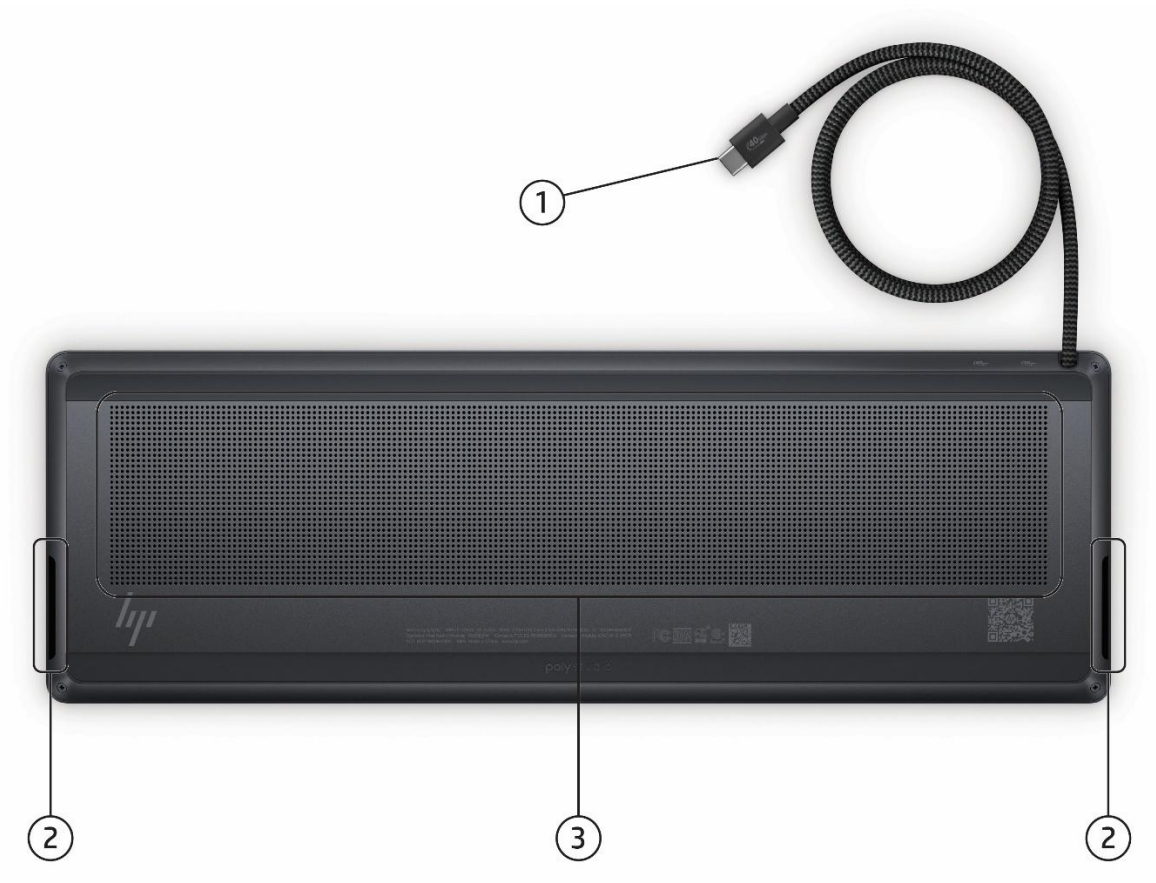


1. Attached Cable USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1, charge support up to 5V/1.5A)
2. USB™ Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, charge support up to 5V/1.5A)
3. USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1, charge support up to 5V/1.5A)
4. Security lock slot (Nano)
5. Integrated microphones

NOTE: 3A TBT/USB4 device not supported; users may experience disconnect when using 3A TBT/USB4.
NOTE: Users may receive slow charge pop-up notification when charging high-wattage devices such as smartphones.
NOTE: Power switching between USB ports while in AC mode is not supported and will result in power down.
NOTE: Connection to docking station devices requires the PC to be connected via the native USB-C cable from the docking station device – not the braided USB-C cable that comes with EliteBoard.

Overview

HP EliteBoard G1a Next Gen AI PC
(Attached Cable)

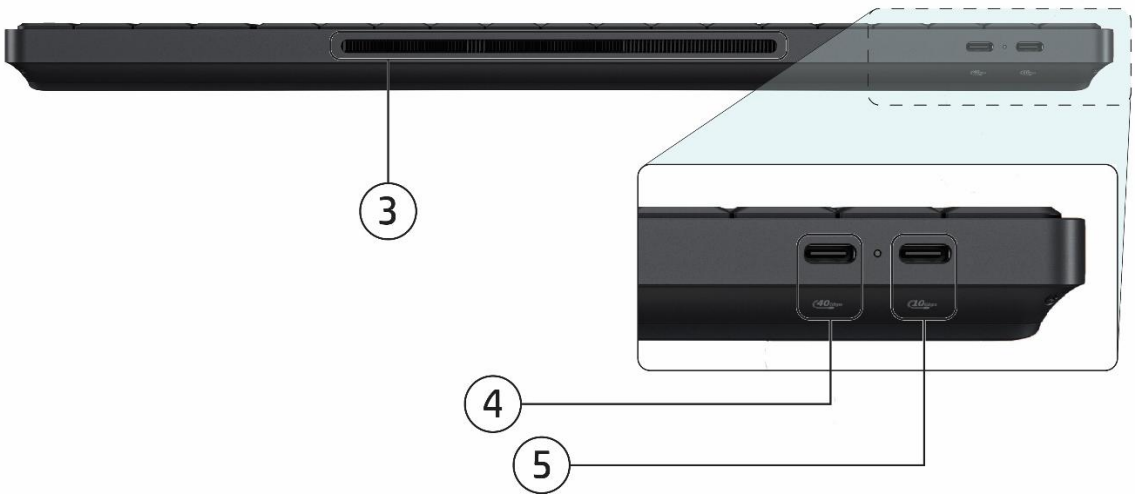


1. Attached Cable USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1, charge support up to 5V/1.5A)
2. Integrated speakers
3. Ventilation panel

Overview

HP EliteBoard G1a Next Gen AI PC
(Detached Cable)





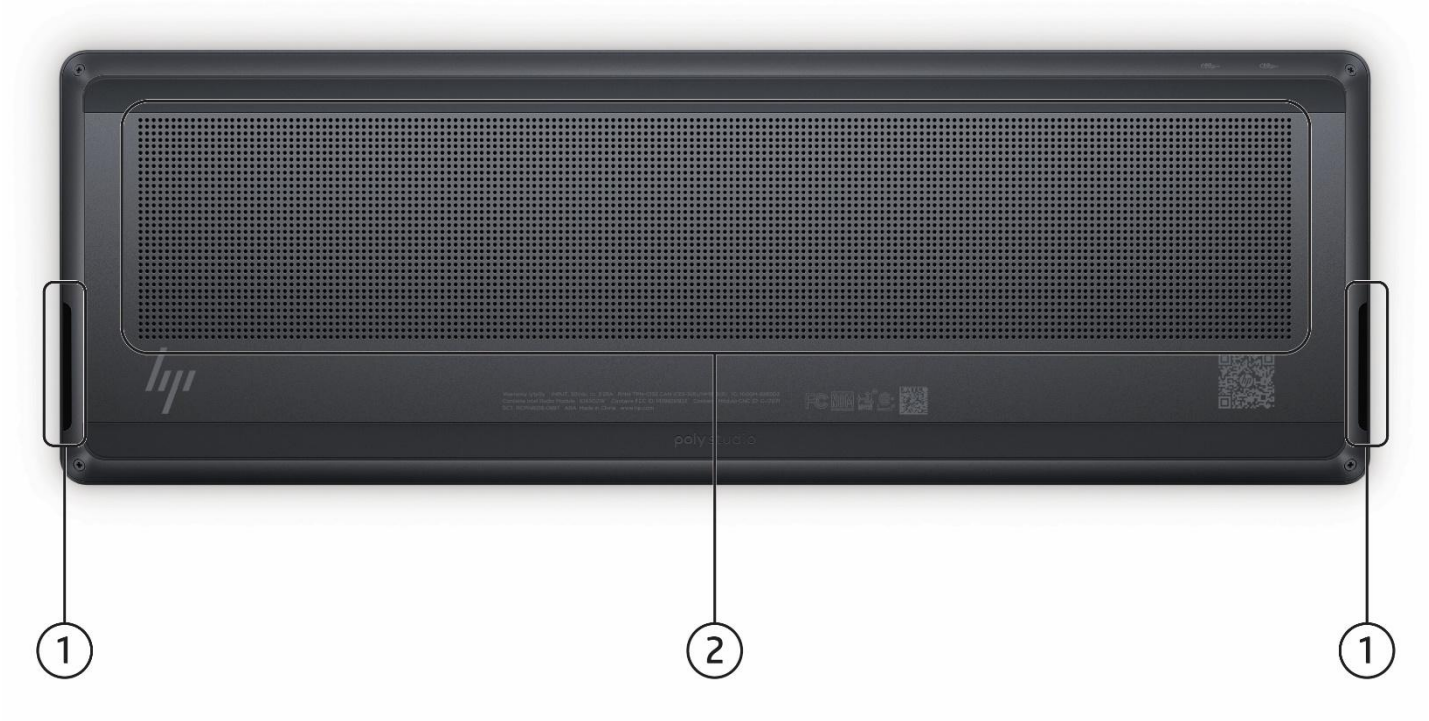
1. Security lock slot (Nano)
2. Integrated microphones

Rear view

3. Ventilation output
4. USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1, charge support up to 5V/1.5A)
5. USB™ Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, charge support up to 5V/1.5A)

NOTE: 3A TBT/USB4 device not supported; users may experience disconnect when using 3A TBT/USB4.
NOTE: Users may receive slow charge pop-up notification when charging high-wattage devices such as smartphones.
NOTE: Power switching between USB ports while in AC mode is not supported and will result in power down.
NOTE: Connection to docking station devices requires the PC to be connected via the native USB-C cable from the docking station device – not the braided USB-C cable that comes with EliteBoard.

HP EliteBoard G1a Next Gen AI PC
(Detached Cable)



1. Integrated speakers
2. Ventilation panel

HP 675 Wireless Multi-Device Mouse





1. Windows Copilot button
2. Scrolling wheel
3. Right button
4. Left button
5. Power switch
6. Connect mode button

NOTE: Mouse must be turned off during transit to prevent waking PC and draining battery

HP HDMI Multiport Hub
(Optional)



1. HDMI 2.1 (primary monitor)
2. RJ-45 1Gbps network jack
3. HDMI 2.1 (secondary monitor)
4. USB Type-C®10Gbps port (PC connection)
5. USB Type-C® power delivery port (AC power connection)

NOTE: EliteBoard is not compatible with webcams embedded in monitors that require HDMI connection. A separate USB-A webcam would be required.
NOTE: HP HDMI Multiport Hub is not compatible with the 10Gpbs multifunction USB-C port. It must be connected to the 40 Gbps USB4 port or connected directly to the attached cable on the fixed cable option.

Features

PRODUCT NAME

HP EliteBoard G1a Next Gen AI PC

OPERATING SYSTEM

Preinstalled

Windows 11 Home - HP recommends Windows 11 Pro for business[1]
Windows 11 Home Single Language - HP recommends Windows 11 Pro for business[1]
Windows 11 Pro (Windows 11 Enterprise available with a Volume Licensing Agreement)[1]
Windows 11 Pro[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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.

PROCESSORS

Processor [1,2,3]	Cores	Threads	L3 Cache	Max Boost Frequency	Base Frequency	Pro	NPU
AMD Ryzen™ AI 7 PRO - 350	8 cores	16	16 MB	5.00 GHz	2.00 GHz	X	50 tops
AMD Ryzen™ AI 5 PRO - 340	6 cores	12	16 MB	4.80 GHz	2.00 GHz	X	50 tops
AMD Ryzen™ AI 5 - 330	4 cores	8	8 MB	4.50 GHz	2.00 GHz		50 tops

Processor Family

AMD Ryzen™ AI 7 PRO - processor
AMD Ryzen™ AI 5 PRO - processor
AMD Ryzen™ AI 5- processor

1. 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.
2. AMD Max Boost frequency performance varies depending on hardware, software and overall system configuration.
3. Features and software that require a NPU may require software purchase, subscription or enablement by a software or platform provider, and third party software may have specific configuration or compatibility requirements. Potential NPU inferencing performance varies by use, configuration, and other factors.

GRAPHICS

Integrated

AMD® Radeon™ 860M Graphics (Integrated in Ryzen AI 7 PRO 350)
AMD® Radeon™ 840M Graphics (Integrated in Ryzen AI 5 PRO 340)
AMD® Radeon™ 820M Graphics (Integrated in Ryzen AI 5 330)

Supported protocols

HDMI 2.1

NOTE: Support HDMI 2.1 with HP HDMI Multiport Hub

Displays supported (Dock/Hub/Dongle may be required)

Up to 4

STORAGE AND DRIVES

Storage

2 TB PCIe® Gen5x4 NVMe™ Value SSD[1,2]
1 TB PCIe® Gen5x4 NVMe™ Value SSD[1,2]
1 TB PCIe® NVMe™ SSD Value[1]
512 GB PCIe® Gen5x4 NVMe™ Value SSD[1,2]
512 GB PCIe® Gen5x4 NVMe™ Self Encrypted OPAL2 Value SSD[1,2]
512 GB PCIe® NVMe™ SSD Value[1]
256 GB PCIe® NVMe™ Self Encrypted OPAL2 SSD Value[1]
256 GB PCIe® NVMe™ SSD Value[1]
32GB eMMC v5.0 Embedded Flash Storage

1. For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 32 GB is reserved for system recovery software.
2. System is limited to PCIe Gen4x4 capabilities even when PCIe Gen5x4 storage is installed.

MEMORY

Maximum memory

64GB DDR5-5600 MT/s (2 x 32 GB)[1]

Memory configuration

Memory slots

2 SODIMM
System runs at 5600 MT/s
Supports Dual Channel Memory(optional).
The memory is accessible/upgradeable by IT or self-maintainers only

1. 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

Items below may be optional

WLAN

Mediatek MT7925 Wi-Fi 7 Bluetooth® 6.0 AIM-T WW WLAN[1]
Mediatek RZ616 Wi-Fi 6E Bluetooth® 5.3 AIM-T WLAN[1]

1. Wi-Fi 7 requires a Wi-Fi 7 router, sold separately, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 7 is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 7 is supported. Wi-Fi 7 is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels.
2. Wi-Fi 6E requires a Wi-Fi 6E router, sold separately to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.
3. Wi-Fi 6E is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately.

Features

AUDIO/MULTIMEDIA

Audio

Audio by Poly Studio
2 Integrated stereo speakers
Discrete Amplifiers
2 Integrated dual array microphones
1W/ 8 ohms per speaker

Sensor

Fingerprint Sensor (optional)
HP Tamper Lock[1]

1. HP Tamper Lock must be enabled by the customer or your administrator.

KEYBOARD/MOUSE FEATURES

Keyboard

HP Premium Keyboard, spill-resistant, easy clean, backlit, top-mount serviceable, full-size with numpad

Pointing Device

HP 675 Wireless Multi-Device Mouse
Pre-paired with PC (default Bluetooth 1 channel)
Includes USB Type-C dongle and 2 AAA batteries required for operation

Function keys

ESC
F1 - Audio Mute
F2 - Volume Down
F3 - Volume Up
F4 - Mic Mute
F5 - Play and Pause
F6 - Display Switching
F7 - Print Screen
F8 - Clipboard
F9 - Backlight
F10 – Search
F11 – Programmable Key
F12 - System Settings
Power Button (with LED)
Insert
Delete
Home
End
Page up
Page down
Microsoft Copilot[1]

1. May require Windows Update or app download from the Microsoft Store. Microsoft Copilot is NOT available in China, Russia, Belarus, and embargoed regions Cuba, Iran, North Korea, Crimea.

SOFTWARE AND SECURITY

Application Software
Buy Microsoft Office (Sold Separately)[1]
Edge Customization HP Connection Optimizer
HP Desktop Support Utilities (Desktops Only)
HP Hotkey Support
HP Notifications
HP PC Hardware Diagnostics UEFI
HP PC Hardware Diagnostics Windows
HP Privacy Settings
HP Services Scan[2]
HP Support Assistant[3]
HSA Fusion for Commercial
HSA Telemetry for CommercialHP app
Poly Studio Desktop[4]
HP IQ[5]

Manageability Features
HP Client Catalog (download)[6]
HP Client Management Script Library (download)[7]
HP Cloud Recovery[8]
HP Connect for Microsoft Endpoint Manager[9]
HP Driver Packs (download)[10]
HP Image Assistant (download)[11]
HP Manageability Integration Kit (download)[12]
HP Patch Assistant (download)[13]
HP Power Manager with Battery Health Manager (download)[14]

Security Features
Secured-Core PC Enable[15]
Windows Hello Enhanced Sign-In Security (ESS)
HP Wolf Security for Business which includes[16]
HP Sure Admin[17]
HP Sure Click[18]
HP Sure Recover[19]
HP Sure Run[20]
HP Sure Sense[21]
HP Sure Start[22]
HP Tamper Lock[23]

Security TPM
Model: Nuvoton NPCT760HAEYX
Firmware Version: 7.2.4.1
Model: ST Micro ST33KTPM2X32DKG9
Firmware Version: 9.257 UFQFPN32
TCG TPM 2.0
FIPS 140-2 Compliant: Yes

Features

BIOS
Absolute Persistence Module[24]
HP Bios Recovery
HP BIOS Update via Network
HP BIOSphere[25]
HP Secure Erase[26]
HP DriveLock & Automatic DriveLock
TPM
UEFI Self Certification Level: 2.9

IPv6 Support
Yes

FirstNet Certified
Yes

Class
3

1. Microsoft 365 sold separately and requires Internet access for activation.
2. HP Services Scan is preinstalled and/or provided thru Windows Update and checks for service entitlement on each hardware device and downloads the applicable software agent automatically. To disable this feature, please follow the instructions at http://www.hpdaas.com/requirements. The HP Insights agent is a telemetry and analytics platform that provides critical data around devices and applications and is not sold as a standalone service. HP follows stringent GDPR privacy regulations and is ISO27001, ISO27701, ISO27017 and SOC2 Type2 certified for Information Security. Internet access with connection to the HP Insights agent is required. For full system requirements, please visit http://www.hpdaas.com/requirements. Not available in China.
3. HP Support Assistant is available on Windows. For more information, please visit https://support.hp.com/us-en/help/hp-support-assistant.
4. Poly Studio Desktop requires a Windows OS.
5. HP IQ app is preloaded on select HP PCs; it will be automatically updated if you have auto updates enabled in Windows or will be available for download from the Microsoft Store. HP IQ app uses artificial intelligence. Features vary by configuration. For complete details see https://support.hp.com/us-en/document/ish_13696672-13696717-16.
6. HP Client Catalog not preinstalled, however available for download at (https://www.hp.com/us-en/solutions/client-management-solutions.html#tab=manageability-tools)
7. HP Client Management Script Library (https://www.hp.com/us-en/solutions/client-management-solutions.html#tab=manageability-tools).
8. HP Cloud Recovery is available for Z by HP, HP Elite and Pro desktops and laptops PCs with Intel® or AMD processors and requires an open, network connection. **NOTE:** You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Detail please refer to: https://support.hp.com/us-en/computer.
9. HP Connect for Microsoft Endpoint Manager is available from the Azure Market Place for HP Pro, Elite, Z and Point-of-Sale PCs managed with Microsoft Endpoint Manager. Subscription to Microsoft Endpoint Manager required and sold separately. Network connection required.
10. HP Driver Packs not preinstalled, however available for download at http://www.hp.com/go/clientmanagement.
11. HP Image Assistant not preinstalled, however available for download at (https://ftp.ext.hp.com/pub/caps-softpaq/cmit/HPIA.html).
12. HP Manageability Integration Kit not preinstalled, however available for downloaded from https://www.hp.com/us-en/solutions/client-management-solutions.html#tab=manageability-tools.
13. HP Patch Assistant available on select HP PCs with the HP Manageability Kit that are managed through Microsoft System Center Configuration Manager. HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html.
14. HP Power Manager with Battery Health can be downloaded by entering your system information here: https://support.hp.com/in-en/document/ish_4449597-3519507-16.
15. Secured-Core PC Enable requires an Intel® vPro®, AMD Ryzen™ Pro processor or Qualcomm® processor with SD850 or higher and requires 8 GB or more system memory. Secured-core PC is enabled from the factory.
16. HP Wolf Security for Business requires Windows 10 or 11 Pro or higher, includes various HP security features and is available on HP Pro, Elite, RPOS and Workstation products. See product details for included security features.
17. HP Sure Admin requires HP G8 or newer platforms, Windows 10 or higher, HP BIOS, HP Manageability Kit or KMS Service from http://www.hp.com/go/clientmanagement and HP Sure Admin Local Access Authenticator smartphone app from the Android or Apple store.

Features

18. HP Sure Click requires Windows 10 and higher. See https://bit.ly/2PrLT6A_SureClick for complete details.
19. HP Sure Recover is available on select HP PCs and requires Windows 10 or 11 and an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data. HP Sure Recover Gen6 with Embedded Reimaging is an optional feature on select HP PCs which requires Windows 10 or 11 must be configured at purchase. You must back up important files, data, photos, videos, etc. before use to avoid loss of data.
20. HP Sure Run is available on select HP PCs and requires Windows 10 and higher.
21. HP Sure Sense requires Windows 10 and higher. See product specifications for availability. On units with WWAN shipping to China, HP Sure Sense is only available via Softpaq download.
22. HP Sure Start is available on select HP PCs and requires Windows 10 and higher.
23. HP Tamper Lock can be Enabled/disabled by customers or IT administrator with administrator authority.
24. Absolute Persistence firmware module is shipped turned off and can only be activated with the purchase a license subscription and full activation of the software agent. License subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. Certain conditions apply. For full details visit: https://www.absolute.com/about/legal/agreements/absolute/.
25. HP BIOSphere Gen6 features may vary depending on the platform and configuration.
26. HP Secure Erase implements the methods outlined in the National Institute of Standards and Technology Special Publication 800-88r "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane™.

PORTS/SLOTS

Rear

1 x USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4)
1 x USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1)
1 x USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1) optional attached cable
1 x Security lock slot (Integrated)

UNIT ENVIRONMENT AND OPERATING CONDITIONS

ENERGY STAR® certified models available

ENERGY STAR® certified. EPEAT registered where applicable. Based on US EPEAT registration according to EPEAT criteria and EPEAT Climate+ achieved, status and tier level varies by country. Visit http://www.epeat.net for more information.
Low halogen (chassis, all internal components and modules)[1]
TAA compliant models available

1. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

UNIT ENVIRONMENT AND OPERATING CONDITIONS

General Unit Operating Guidelines

- Keep the computer away from excessive moisture, direct moisture and the extremes of heat and cold, to ensure that unit is operated within the specified operating range.
- Leave a 10.2 cm (4 in) clearance on all vented sides of the computer to permit the required airflow.
- Never restrict airflow into the computer by blocking any vents or air intakes.
- Do not stack computers on top of each other or place computers so near each other that they are subject to each other's re-circulated or preheated air.
- Occasionally clean the air vents on the front, back, and any other vented side of the computer. Lint, dust and other foreign matter can block the vents and limit the airflow.
- If the computer is to be operated within a separate enclosure, intake and exhaust ventilation must be provided on the enclosure, and the same operating guidelines listed above will still apply.

Temperature Range	Operating: 50° to 95° F (10° to 35° C)[2] Non-operating: -22° to 149° F (-30° to 65° C)
Relative Humidity	Operating: 10% to 90% (non-condensing at ambient) Non-operating: 5% to 95% (non-condensing at ambient)
Maximum Altitude (unpressurized)	Operating: 5000m Non-operating: 50000ft (15240 m)

2. Operating temperature is de-rated 1.0 deg C per 300 m (1000 ft) to 3000 m (10,000 ft) above sea level, no direct sustained sunlight. Maximum rate of change is 10 deg C/Hr. The upper limit may be limited by the type and number of options installed.

ENVIRONMENTAL & INDUSTRY

Eco-Label Certifications & declarations	This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks: • IT ECO declaration • US ENERGY STAR® • US Federal Energy Management Program (FEMP) • EPEAT Gold registered and EPEAT Climate+ attained in the United States. See http://www.epeat.net for registration status in your country.* • China Energy Conservation Program (CECP) • China State Environmental Protection Administration (SEPA) • Taiwan Green Mark • Korea Eco-label • Japan PC Green label • Commission Regulation (EC) No 617/2013 (ErP Lot 3) • China CEL Level 2 **NOTE***: Based on US EPEAT registration according to EPEAT criteria and EPEAT Climate+, status and tier level varies by country. Visit http://www.epeat.net for more information.		
Sustainable Impact Specifications	• At least 75% recycled plastic in the covers, including 5% HP closed loop recycled plastic • At least 75% recycled plastic in the inner frame, including carbon black from recycled tires • Keyboard bracket and keyboard deck made with at least 90% recycled stainless steel • Speakerbox made with at least 50% recycled plastic, including 30% ocean-bound plastic • 100% recycled rare earth magnets in speaker • Keycaps made with at least 75% recycled plastic, including 5% ocean-bound plastic • Keyboard scissor made with at least 30% recycled fishing nets • Keyboard membrane made with at least 70% recycled plastic • Sustainable FPC on keyboard • Thermal fan housing made with at least 50% ocean-bound plastic • Heat plate made with at least 50 % post-consumer recycled copper, including 5% HP closed loop recycled copper • At least 90% recycled plastic in power supply adaptor and 50% recycled plastic in battery pack • 100% sustainably sourced or recycled paper-based packaging		
System Configuration	The configuration used for the Energy Consumption and Declared Noise Emissions data for the Desktop model is based on a “Typically Configured Desktop.		
Energy Consumption (in accordance with US ENERGY STAR® test method)	**115VAC, 60Hz**	**230VAC, 50Hz**	**100VAC, 50Hz**
Normal (Short idle)	3.68W	3.73W	3.60W
Sleep	1.23W	1.30W	1.25W
Off	0.72W	0.75W	0.72W
	NOTE: Energy efficiency data listed is for an ENERGY STAR® certified product if offered within the model family. HP computers marked with the ENERGY STAR® Logo are compliant with the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR® specifications for computers. If a model family does not offer ENERGY STAR® certified configurations, then energy efficiency data listed is for a typically configured PC featuring a hard disk drive, a high efficiency power supply, and a Microsoft Windows® operating system.		

Features

Heat Dissipation*	**115VAC, 60Hz**	**230VAC, 50Hz**	**100VAC, 50Hz**
Normal Operation (Short idle)	12.5 BTU/hr	12.7 BTU/hr	12.3 BTU/hr
Sleep	4.2 BTU/hr	4.4 BTU/hr	4.3 BTU/hr
Off	2.5 BTU/hr	2.6 BTU/hr	2.5 BTU/hr

NOTE: Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)	Sound Power (L_{WAd}, bels)	Sound Pressure (L_{pAm}, decibels)
Typically Configured – Idle	2.2	15
Fixed Disk – Random writes	3.3	15.5

Longevity and Upgrading	This product can be upgraded, possibly extending its useful life by several years. Upgradeable features and/or components contained in the product may include: Spare parts are available throughout the warranty period and or for up to "5" years after the end of production.
Additional Information	• This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC. • This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive – 2002/96/EC. • This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986). • This product is registered as EPEAT Gold and has attained EPEAT Climate+ in the US, status and tier level varies by country, see http://www.epeat.net • Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043. • This product is 92.7% recycle-able when properly disposed of at end of life.

Packaging Materials	**External:**	PAPER/Corrugated Box	226 g
	Internal:	PAPER/Corrugated Insert	99 g
		Bamboo Bag	10 g
	The corrugated paper packaging materials contain at least 80.0% recycled content.		
RoHS Compliance	HP Inc. complies fully with materials regulations. We were among the first companies to extend the restrictions in the European Union (EU) Restriction of Hazardous Substances (RoHS) Directive to our products worldwide through the HP GSE. HP has contributed to the development of related legislation in Europe, as well as China, India, and Vietnam. We believe the RoHS directive and similar laws play an important role in promoting industry-wide elimination of substances of concern. We have supported the inclusion of additional substances—including PVC, BFRs, and certain phthalates—in future RoHS legislation that pertains to electrical and electronics products. We met our voluntary objective to achieve worldwide compliance with the new EU RoHS requirements for virtually all relevant products by July 2013, and we will continue to extend the scope of the commitment to include further restricted substances as regulations continue to evolve. To obtain a copy of the HP RoHS Compliance Statement, see: HP RoHS position statement.		

Features

Material Usage	This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf): • Asbestos • Certain Azo Colorants • Certain Brominated Flame Retardants – may not be used as flame retardants in plastics • Cadmium • Chlorinated Hydrocarbons • Chlorinated Paraffins • Formaldehyde • Halogenated Diphenyl Methanes • Lead carbonates and sulfates • Lead and Lead compounds • Mercuric Oxide Batteries • Nickel – finishes must not be used on the external surface designed to be frequently handled or carried by the user. • Ozone Depleting Substances • Polybrominated Biphenyls (PBBs) • Polybrominated Biphenyl Ethers (PBBEs) • Polybrominated Biphenyl Oxides (PBBOs) • Polychlorinated Biphenyl (PCB) • Polychlorinated Terphenyls (PCT) • Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications. • Radioactive Substances • Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)
Packaging Usage	HP follows these guidelines to decrease the environmental impact of product packaging: • Design packaging materials for ease of disassembly. • Maximize the use of post-consumer recycled content materials in packaging materials. • Use readily recyclable packaging materials such as paper and corrugated materials. • Reduce size and weight of packages to improve transportation fuel efficiency. • Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.
End-of-life Management and Recycling	HP Inc. offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: http://www.hp.com/go/reuse-recycle or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner. The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/recyclers. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment. Global Citizenship Report http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html Eco-label certifications http://www8.hp.com/us/en/hp-information/environment/ecolabels.html ISO 14001 certificates: http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=c04755842 and http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf

Features

footnotes	1. Percentage of ocean-bound plastic & PCR contained in each component varies by product. 2. Recycled plastic content percentage is based on the definition set in the EPEAT criteria. 3. 100% outer box packaging and corrugated cushions made from sustainably sourced certified and recycled fibers. 4. Fiber cushions made from 100% recycled wood fiber and organic materials. 5. Plastic cushions are made from >90% recycled plastic.

SERVICE AND SUPPORT

On-site Warranty[1]: One-year (1-1-1) limited warranty delivers one year of on-site, next business day[2] service for parts and labor support. Service offers terms up to 5 years by choosing an optional HP Care Pack. To choose the right level of service for your HP product, visit HP Care Pack Central: http://www.hp.com/go/cpc.[3]

1. Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.
2. On-site service may be provided pursuant to a service contract between HP and an authorized HP third-party provider and is not available in certain countries. Global service response times are based on commercially reasonable best effort and may vary by country.
3. 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 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.

CERTIFICATION AND COMPLIANCE

Energy Efficiency Compliance

ENERGY STAR certified. EPEAT registered where applicable. EPEAT registration varies by country. See http://www.epeat.net for registration status by country.

SYSTEM UNIT

Stand-Alone Power Requirements (AC Power)	
Nominal Operating Voltage	20.0V
Max Operating Power	UMA 65W
Temperature	
Operating	0° to 35° C (32° to 95° F) System performance may be reduced above 32°C (89.6°F)
Non-operating	-20° to 60° C (-4° to 140° F) System performance may be reduced above 32°C (89.6°F)
Relative Humidity	
Operating	10% to 90 % (non-condensing)
Non-operating	5% to 95 %, 38.7° C (101.6° F) maximum wet bulb temperature
Shock	
Operating	40 G, 2 ms, half-sine
Non-operating	240 G, 2 ms, half-sine
Random Vibration	
Operating	1.043 grms
Non-operating	3.500 grms
Altitude (unpressurized)	
Operating	3048 m (10000 ft)
Non-operating	12192 m (40000 ft)

Features

Industry Standard Certifications	
Regulatory Model Number	HSC-I012KP
CSA/UL 62368-1	Yes
UL 62368-1	Yes
ENERGY STAR®	Yes[1]
FCC/ICES/CISPR/VCCI	Yes
CE MARKING	Yes
GS Mark	Yes Related commodity should comply with ISO 9241 Standards.
China CCC/SRRC/CEL	Yes
Taiwan BSMI/NCC	Yes
Korea KCC/KC/KES	Yes
Ukraine NSoC/TEC	Yes
EAEU Compliance	Yes
Saudi Arabian Compliance	Yes
TCO	Yes
EPEAT Gold	Yes[2]
WW RoHS	Yes
CECP	TBD These are requirements from the Category PM, which usually occur after RTP. At this stage, no requests have been received yet.
Medical EMC: IEC 60601-1-2:2014 EN60601-1-2: 2015	
SEPA	TBD These are requirements from the Category PM, which usually occur after RTP. At this stage, no requests have been received yet.
MIL-STD 810H Testing	Yes[3]

1.Configurations that are ENERGY STAR® qualified are identified as ENERGY STAR on HP websites and on http://www.energystar.gov
2. Based on US EPEAT registration according to EPEAT criteria and EPEAT Climate+, status and tier level varies by country. Visit http://www.epeat.net for more information.
3.MIL-STD testing is not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Pack. MIL-STD 810H military tests passed include transit drop test, functional shock test, vibration test, blowing dust test, humidity test, altitude test, high temperature test, low temperature test, and thermal shock test.

PROCESSORS

AMD® Ryzen™ AI PRO 300 Series Processors

Architecture: “Zen 5”
Process Node: 4nm.
Neural Processing Unit (NPU).
AMD Integrated Manageability Technology (AIM-T).
AMD® PRO Technologies.
AMD® Memory Guard – Helps defend against cold boot attacks with real time encryption of memory.
AMD® PRO manageability – DASH including KVM Redirection Profile with hardware enforcement.

GRAPHICS

AMD Radeon™ Graphics (integrated)

Up to four simultaneous displays, 4K60Hz display concurrent with:

- Single external display up to 8K 120Hz.
- Up to 4x4K 60Hz External display simultaneously

Multi Display Support

Maximum of 4 displays supported by the integrated graphics, support up to 4K by each display in multi display scenario

USB-C	Supports DisplayPort™ Alt Mode
MEMORY	Frame buffer carveout size from 512MB to 16GB
Maximum Color Depth	Up to 10 bits
Graphics/Video API Support	Ryzen AI PRO and Ryzen AI APUs: • DirectX 12 • Vulkan 1.3 • OpenCL 2.0 • OpenGL 4.6 VP9, H264, H265 decode with 8bit and 10bit depth and up to 4K@24, 30 and 60 FPS video at Vmin. H264, H265 8bit video encode up to 4K@30 or 60fps
Max resolution (USB4)	DP ALT Mode DP2.1 UHBR20 7680 x 4320@60Hz
Max resolution (USB-C)	DP ALT Mode DP1.4a HBR3 3840 x 2160@60Hz

STORAGE

1TB PCIe Gen5 2280 NVMe Value Solid State Drive	
Form Factor	M.2 2280
Capacity	1TB
NAND Type	Value
Weight	10 g (0.02 lb)
Interface	PCIe NVMe Gen5X4
Sequential Read	7000 MB/s ±20%
Sequential Write	6600 MB/s ±20%
Logical Blocks	2000409264
Features	Pyrite 2.0; TRIM; L1.2

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows) is reserved for system recovery software.

SSD 1TB 2280 PCIe NVMe Value	
Form Factor	M.2 2280
Capacity	1TB
NAND Type	Value
Weight	10 g (0.02 lb)
Interface	PCIe NVMe Gen4X4
Sequential Read	3500 MB/s ±20%
Sequential Write	2700 MB/s ±20%
Logical Blocks	2000409264
Features	Pyrite 2.0; TRIM; L1.2

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows) is reserved for system recovery software.

SSD 256GB 2280 PCIe NVMe Value	
Form Factor	M.2 2280
Capacity	256GB
NAND Type	Value
Weight	10 g (0.02 lb)
Interface	PCIe NVMe Gen4X4
Sequential Read	3100 MB/s ±20%
Sequential Write	1200 MB/s ±20%
Logical Blocks	500118192
Features	Pyrite 2.0; TRIM; L1.2

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows) is reserved for system recovery software.

SSD 512GB 2280 PCIe NVMe Value

Form Factor	M.2 2280
Capacity	512GB
NAND Type	Value
Weight	10 g (0.02 lb)
Interface	PCIe NVMe Gen4X4
Sequential Read	3500 MB/s ±20%
Sequential Write	1600 MB/s ±20%
Logical Blocks	1000215216
Features	Pyrite 2.0; TRIM; L1.2

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows) is reserved for system recovery software.

256GB PCIe 2280 NVMe Self Encrypted OPAL2 Value Solid State Drive

Form Factor	M.2 2280
Capacity	256GB
NAND Type	Value
Weight	10 g (0.02 lb)
Interface	PCIe NVMe Gen4X4
Sequential Read	3100 MB/s ±20%
Sequential Write	1200 MB/s ±20%
Logical Blocks	500118192
Features	Opal 2.0; TRIM; L1.2

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows) is reserved for system recovery software.

2TB PCIe Gen5 2280 NVMe Value Solid State Drive

Form Factor	M.2 2280
Capacity	2TB
NAND Type	Value
Weight	10 g (0.02 lb)
Interface	PCIe NVMe Gen5X4
Sequential Read	7000 MB/s ±20%
Sequential Write	6800 MB/s ±20%
Logical Blocks	4,000,797,360
Features	Pyrite 2.0; TRIM; L1.2

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows) is reserved for system recovery software.

512GB PCIe Gen5 2280 NVMe Self Encrypted OPAL2 Value Solid State Drive

Form Factor	M.2 2280
Capacity	512GB
NAND Type	Value
Weight	10 g (0.02 lb)
Interface	PCIe NVMe Gen5X4
Sequential Read	3500 MB/s ±20%
Sequential Write	1600 MB/s ±20%
Logical Blocks	1000215216
Features	Opal 2.0; TRIM; L1.2

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows) is reserved for system recovery software.

512GB PCIe Gen5 2280 NVMe Value Solid State Drive

Form Factor	M.2 2280
Capacity	512GB
NAND Type	Value
Weight	10 g (0.02 lb)
Interface	PCIe NVMe Gen5X4
Sequential Read	7000 MB/s ±20%
Sequential Write	6000 MB/s ±20%
Logical Blocks	1000215216
Features	Pyrite 2.0; TRIM; L1.2

NOTE: For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB (for Windows) is reserved for system recovery software.

NETWORKING AND COMMUNICATIONS

MediaTek MT7925 Wi-Fi7 + Bluetooth® T6.0 (802.11be 2x2, AMD AIM-T)[1]	
Wireless LAN Standards	IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac IEEE 802.11ax IEEE 802.11be IEEE 802.11d IEEE 802.11e IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v IEEE 802.11w
Interoperability	Wi-Fi certified
Frequency Band	802.11b/g/n/ax/be • 2.402 – 2.482 GHz 802.11a/n/ac/ax/be • 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 • 5.955 – 6.415 GHz • 6.435 – 6.515 GHz • 6.535 – 6.875 GHz • 6.895 – 7.115 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: max 300Mbps • 802.11ac: 1733Mbps • 802.11ax: max 2.4Gbps • 802.11be : max 2.8Gbps (160MHz)
Modulation	Direct Sequence Spread Spectrum OFDM, BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024QAM, 4096QAM
Security	• 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 • WPA3 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	• 802.11b, 1Mbps: +17dBm minimum • 802.11g, 6Mpbs: +16dBm minimum • 802.11a, 6Mbps: +17dBm minimum • 802.11n, MCS7(HT20): +14dBm minimum • 802.11n, MCS7(HT40): +13.5dBm minimu • 802.11ac MCS9(VHT20): 13.5dBm minimum • 802.11ac MCS9(VHT40): +13.5dBm minimum • 802.11ac MCS9(VHT80): +12.5dBm minimum • 802.11ac MCS9(VHT160): +10.5dBm minimum • 802.11ax MCS11(HE20)(6GHz): +11.5dBm minimum • 802.11ax MCS11(HE40)(6GHz): +7.5dBm minimum • 802.11ax MCS11(HE80)(6GHz): +7.5dBm minimum • 802.11ax MCS11(HE160)(6GHz): +7.5dBm minimum • 802.11be MCS13(EHT20)(6GHz): 11.5dBm • 802.11be MCS13(EHT40)(6GHz): +7.5dBm • 802.11be MCS13(EHT80)(6GHz): +7.5dBm • 802.11be MCS13(EHT160)(6GHz): +6.5dBm
Power Consumption	• Transmit mode 2.7 W • Receive mode 1.8 W • Idle mode (PSP) 180 mW (WLAN Associated) • Idle mode 50 mW (WLAN unassociated) • Connected Standby 10mW • Radio disabled 8 mW
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode
Receiver Sensitivity[2]	•802.11b, 1Mbps: -93.5dBm maximum •802.11b, 11Mbps: -85dBm maximum • 802.11a/g, 6Mbps: -90.5dBm maximum • 802.11a/g, 54Mbps: -72.5dBm maximum • 802.11n, MCS0(HT20): -90dBm maximum • 802.11n, MCS7(HT20): -71.5dBm maximum • 802.11n, MCS0(HT40): -88.5dBm maximum • 802.11n, MCS7(HT40): -68.5dBm maximum • 802.11ac, MCS9(VHT20): -88.5dBm maximum • 802.11ac, MCS9(VHT40): -65.5dBm maximum • 802.11ac, MCS9(VHT80): -60.5dBm maximum • 802.11ac, MCS9(VHT160): -58.5dBm maximum • 802.11ax, MCS11(HE20) (6GHz): -59.5dBm maximum • 802.11ax, MCS11(HE40) (6GHz): -56.5dBm maximum • 802.11ax, MCS11(HE80) (6GHz): -53.5dBm maximum • 802.11ax, MCS11(HE160) (6GHz): -51.5dBm maximum • 802.11be, MCS13(EHT20) (6GHz): -55.5dBm maximum • 802.11be, MCS13(EHT40) (6GHz): -53.5dBm maximum • 802.11be, MCS13(EHT80) (6GHz): -51.5dBm maximum • 802.11be, MCS13(EHT160) (6GHz): -48.5dBm maximum

Technical Specifications –Networking and Communications

Antenna type	High efficiency antenna with spatial diversity, mounted in the display enclosure. Two embedded tri-band 2.4/5/6 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
Weight	1. 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	N/A
HP Integrated Module with Bluetooth® 4.0/4.1/4.2/5.0/5.1/5.2/5.3/5.4/6.0 Wireless Technology	
Bluetooth® Specification	4.0/4.1/4.2/5.0/5.1/5.2/5.3/5.4/6.0 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 I Bluetooth device with a maximum transmit power of +15.5 dBm for BR and +13dBm for EDR.
Power Consumption	Peak (Tx): 330 mW Peak (Rx): 230 mW Selective Suspend: 17 mW
Bluetooth® Software Supported Link Topology	1. Microsoft Windows Bluetooth Software 2. Linux/Chrome OS Bluetooth Software.
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode
Certifications	FCC (47 CFR) Part 15C, Section 15.247 & 15.249 ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark

Bluetooth® Profiles Supported	Bluetooth® 4.1-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 Bluetooth® 4.2 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) Bluetooth® 5.2 ESR9/10 Compliance LE Advertisement Extensions Channel Selection Algo Limited High Duty Cycle Non-Connectable Advertising 2Mbps LE LE Long Range Bluetooth® 5.3 Host to Controller Encryption Key Control Enahancements Compliance to the latest Errata Sectipn 12.3 of Bluetooth® 5.3 specification Bluetooth® 5.4 Bluetooth® 6.0

MediaTek RZ616 Wi-Fi 6E + Bluetooth® 5.3 (802.11ax 2x2, AMD AIM-T)[3,4]	
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 802.11j IEEE 802.11k IEEE 802.11mc IEEE 802.11r IEEE 802.11v IEEE 802.11w"
Interoperability	Wi-Fi certified

Technical Specifications –Networking and Communications

Frequency Band	802.11b/g/n/ax • 2.402 – 2.482 GHz 802.11a/n/ac/ax • 5.15 – 5.25 GHz • 5.25 – 5.35 GHz • 5.47 – 5.725 GHz • 5.825 – 5.850 GHz • 5.925 – 7.125 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, (20MHz, 40MHz, ,80MHz & 160MHz) • 802.11ax: MCS0 ~ MCS11, (20MHz, 40MHz, ,80MHz & 160MHz)
Modulation	Direct Sequence Spread Spectrum OFDM, BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024QAM
Security	• IEEE and WiFi certified 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 • WPA3 (personal) 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	2.4GHz (MIMO, typical): • 802.11b: +18dBm • 802.11g: +16.5dBm • 802.11n/ac/ax (HT20/VHT20/HE20): +16dBm • 802.11n/ac/ax (HT40/VHT40/HE40): +12.5dBm 5GHz (MIMO, typical): • 802.11a: +13dBm • 802.11n/ac/ax (HT20/VHT20/HE20): +13.5dBm • 802.11n/ac/ax (HT40/VHT40/HE40): +12.5dBm • 802.11ac/ax (VHT80/HE80): +11.5dBm • 802.11ax HE160: +11.5dBm" 6GHz LPI mode (MIMO, typical):: • 802.11a: 0dBm • 802.11ax HE20: +1dBm • 802.11ax HE40: +4dBm • 802.11ax HE80: +7dBm • 802.11ax HE160: +7.5dBm

Power Consumption	• Transmit mode:2.5 W • Receive mode:2 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[2]	2.4GHz (SISO): •802.11b, 11Mbps: -82dBm maximum • 802.11g, 54Mbps: -71dBm maximum • 802.11n, MCS7: -64dBm maximum • 802.11ac, MCS9: -52dBm maximum •802.11ax, MCS11(HT40): -49dBm maximum 5GHz (SISO): • 802.11a, 54Mbps: -71dBm maximum • 802.11n, MCS07: -64dBm maximum • 802.11ac, MCS9: -52dBm maximum •802.11ax, MCS11(HE80/HE160): -46dBm maximum 6GHz (SISO): • 802.11a, 54Mbps: -71dBm maximum • 802.11n, MCS7: -64dBm maximum • 802.11ac, MCS9: -52dBm maximum •802.11ax, MCS11(HE160): -46dBm maximum
Antenna type	Two embedded dual band 2.4/5/6 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
Weight	1. 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 60% (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	N/A
HP Integrated Module with Bluetooth® 4.0/4.1/4.2/5.0/5.1/5.2/5.3 Wireless Technology	
Bluetooth® Specification	4.0/4.1/4.2/5.0/5.1/5.2/5.3 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 1.5 Bluetooth device with a maximum transmit power of + 14 dBm and 10 dBm for BR and EDR, respectively.
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 & 15.407 ETS 300 328 Low Voltage Directive CE Mark
Bluetooth® Profiles Supported	Bluetooth® 4.1-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 Bluetooth® 4.2 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) Bluetooth® 5.2 ESR9/10 Compliance LE Advertisement Extensions Channel Selection Algo Limited High Duty Cycle Non-Connectable Advertising 2Mbps LE LE Long Range Windows Bluetooth profiles support Bluetooth® 5.3 Periodic Advertisement interval Encryption key size control enhancements

1.Wi-Fi 7 requires a Wi-Fi 7 router, sold separately, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 7 is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 7 is supported. Wi-Fi 7 is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels.
2. 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).
3. Wi-Fi 6E requires a Wi-Fi 6E router, sold separately to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.
4. Wi-Fi 6E is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately.

POWER

Power supply availability may vary by country

65W Gallium Nitride USB-C AC power adapter

Weight (DC Cable Included)	185 g ± 10 g
Input	100 ~ 240 Vac
Input Efficiency	USB-C 89.00 % min at 115 Vac/ 230 Vac @ 20.00 V/ 3.25 A
Input frequency range	47 ~ 63Hz
Input AC current	Max. 1.6 A at 90 Vac input
Output	
Output power	20.00 V / 65.00 W
DC output	+ 20.00 V
Hold-up time	5 ms at 115 Vac input
Output Over Current Protection	5.40 A (max)
AC Inlet Type	Fixed 2 Prong
DC Cable Connector	USB type C
DC Cable Material	Halogen Free
Connector	
Connector	Foldable for 2 prong / Fixed 2 Prong[1]
Environmental Design	
Operating temperature	0° to 35° C (32° to 95° F)
Non-operating (storage) temperature	-20° to 85° C (-4° to 185° F)
Altitude	0 to 5,000 m (0 to 16,400 ft)
Humidity	20% to 95%
Storage Humidity	10% to 95%
EMI and Safety Certifications	Worldwide safety standards - IEC60950-1 and IEC62368-1: 2018, EN62368-1:2014+A11, UL62368-1 Agency approvals - C-UL-US, TUV/GS, TUV/PSE, EN55032 Class B, FCC Class B, CISPR32 Class B, CCC and CECP, CU(EAC), EAEU, KCC(Safety+EMC) and K-MEPS, NOM-001 and 029 NYCE, NRcan, NRCS, ISC, SEC, PSB, Argentina S-mark, Australia GEMS and RCM, BIS, BSMI, UAE, UKCA DoC

1. International options are available based on country of configuration.

BATTERY

Battery is internal and can be replaced via service spare kit
Battery service spare kit only supported on units originally configured w battery

NX 32Whr Long Life Polymer Fast charge 2 cell Battery

Dimensions (H x W x L)	H 7.84 mm x W 88.50mm x L 101.60mm
Weight	127g ± 10 g (0.28lb)
Cells/Type	2 cell Lithium-Ion Polymer
Energy	
Voltage	7.70V
Amp-hour capacity	4.234Ah
Watt-hour capacity	32Wh
Temperature	
Operating (Charging)	0° C ~ 45° C
Operating (Discharging)	-10° C ~ 60° C
Optional Travel Battery Available	No

Battery Recharge Time
Supports battery HP Fast Charge: approximately 50% in 30 minutes[1]

Battery life[2]
Up to 7 hours with 32Whr battery (AMD AI KRK R7, UMA graphics, 2x8GB DDR5 memory, 256GB SSD), external monitor.
Up to 3 hours with 32Whr battery (AMD AI KRK R7, UMA graphics, 2x8GB DDR5 memory, 256GB SSD), external portable monitor.

1. Recharges your battery up to 50% within 30 minutes when the system is off or in standby mode. Power adapter minimum of 65 watts required for battery capacities 32Whr.
2. Mobile Mark 30 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

AUDIO

Codec	Realtek ALC3315
Internal Speaker Amplifier	TAS2783 SoundWireSM Class D Amplifier with Integrated DSP
Multi-streaming Capable	Playback multi-streaming can be enabled in the audio control panel to allow independent audio streams to be sent to/from the integrated speaker., Following MSFT Behavior
Sampling	DAC: Supports resolutions from 16-bit to 24-bit;48.0 kHZ to 48.0 kHz ADC: Supports resolutions from 16-bit to 24-bit;44.1 kHZ to 48.0 kHz
Internal Speaker	Yes

Technical Specifications – Fingerprint Reader & Mouse

FINGERPRINT READER

Sensor vendor	ELAN
Sensor type	Capacitive
DPI resolution	508 DPI
Scan area	80 x 80 pixels
False Rejection Rate	< 3%
False Acceptance Rate	< 0.001%
Mobile Voltage Operation	2.8 V ~ 3.6 V
Operating Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Current Consumption Image	100 mA max
Low Latency Wait For Finger	300 uA
Capture Rate	50 frames/sec
ESD Resistance	IEC 61000-4-2 4B (+15KV)
Detection Matrix	508 dpi / 4.0 x 4.0 mm sensor area

MOUSE

HP 675 Wireless Multi-Device Mouse		
Dimensions (HxLxW)	4.83 x 2.55 x 1.55 in / 122.82 x 64.74 x 39.27 mm	
Weight	0.16lb / 71g (no Battery）	
Environmental	Operating temperature	10°C~50°C
	Non-operating temperature	-30°C~65°C
	Operating humidity	10%~90%RH
	Non-operating humidity	0~95%RH
	Operating shock	N/A
	Non-operating shock	30G's. Test also at 40 and 50G's to find margin. All six faces: Front, Rear, Left, Right, Bottom, and Top.The number of shocks: 1 shock/face.
	Operating vibration	5-100HZ, Grms Level 1.05 Grms, Test 30 minutes for each axis.
	Non-operating vibration	5-500HZ, Grms Level 1.05 Grms, Test 30 minutes for each axis.
Electrical	Operating voltage	1.5V - 1.0V
	Power consumption (typical)	2.4GHz: active= 2.5mA max., Idle=0.3mA max., sleep=0.15mA max., deep sleep=0.05mA max. BLE active= 2.6mA max., Idle=0.15mA max., sleep=0.12mA max., deep sleep=0.05mA max.
	Resolution	6000max.
	Sensor	PAW3230DB-TXDL
	Tracking speed (Report rate)	2.4GHz/ BLE: 125Hz
	Tracking acceleration	10g
Mechanical	Color	Eclipse Gray
Regulatory approvals	Compliant	CB; FCC; IC; UL; ENCOM; ANATEL; SUBTEL; RCM; WPC; CONATEL; TRA; CE; TUV GS; ICASA; SRRC; DJID; TELEC; VCCI; KCC; SIRIM; NTC; IMDA; NCC; BSMI; NBTC

WEIGHTS AND DIMENSIONS

Chassis (WxDxH)	14.1 x 4.66 x RE 0.69 & FE 0.49 in (357.95 x 118.5 x RE 17.5 & FE 12.5 mm)
Standard System Weight	Nexus (Non-Battery, Non - capture cable SKU) 1.49lb (676 g) Nexus W (Non-Battery, capture cable SKU) 1.60lb (726 g) Nexus B (Battery, Non - capture cable SKU) 1.69lb (768 g)
Packaging (WxHxD)	16.06 x 10.35 x 2.24 in (408 x 263 x 57 mm)
Shipping Weight	3.26 kg (7.18 lb)
Palletization Profile	For Air 46 units per layer 5 layers max 230 units per pallet 1200 x 1000 x 1465 mm (include the pallet) For Ocean 46 units per layer 7 layers max 322 units per pallet 1200 x 1000 x 1991 mm (include the pallet)

NOTES:
1. Actual weight depends on configuration.
2. Packaging material used will vary by country.
3. The palletization is for single pack.
4. Palletization options depend on the factories.

MISCELLANEOUS FEATURES

Management Features

- Advanced Configuration and Power Management interface (ACPI). Allows the system to wake from a low power mode. Controls system power consumption, making it possible to place individual cards and peripherals in a low-power or powered-off state without affecting other elements of the system.
- Dual State Power Button: acts as both an on/off button and a suspend-to-sleep button

Serviceability Features

- HP PC Hardware Diagnostics UEFI:
  - This utility enables hardware level testing outside the operating system on many components. The diagnostics can be invoked by pressing F2 at POST, and is available as a download from HP Support
- System/Emergency ROM
- Flash ROM
- CMOS Battery (only apply on units w/o internal battery)
- Over-Temp Warning on Screen (Requires IM Agents)
- DIMM Connectors for easy Upgrade

AFTER MARKET OPTIONS

Adapters	Part Number
HP USB-C to DisplayPort Adapter G2	8Y8Y1AA
HP USB-C to HDMI 2.0 Adapter	1WC36AA
HP USB-C to USB 3.0 Adapter	N2Z63AA

Audio - Earbuds	Part Number
Poly Voyager Free 60+ UC Carbon Black Earbuds +BT700 USB-C Adapter +Touchscreen Charge Case	7Y8G4AA, 7Y8H2AA
Poly Voyager Free 60+ UC M Carbon Black Earbuds +BT700 USB-C Adapter +Touchscreen Charge Case	7Y8H0AA

Audio - Headset	Part Number
Poly Blackwire 3220 Stereo USB-C Headset +USB-C/A Adapter	8X228AA
Poly Blackwire 3210 Monaural Headset +USB-C/A Adapter CUST1	9P7X7AA
Poly Blackwire 3220 Stereo Headset +USB-C/A Adapter CUST1	9P7X8AA
Poly Blackwire 3225 Stereo USB-C Headset +3.5mm Plug +USB-C/A Adapter Batch 2	8X229AA
Poly Blackwire 3225 USB-C Headset CUST1 Batch 2	8G0X1AA
Poly Blackwire 3225 Stereo USB-C Headset +3.5mm Plug +USB-C/A Adapter Batch 2	8X229AA
Poly Blackwire 3225 USB-C Headset CUST1 Batch 2	8G0X1AA
Poly Blackwire 3320 Stereo Microsoft Teams Certified USB-C Headset +USB-C/A Adapter	8X220AA
Poly Blackwire 3320 Microsoft Teams Certified USB-C Headset CUST1 Batch 2	8G0Y9AA
Poly Blackwire 3320 USB-C Headset CUST1 Batch 2	8G0Y8AA
Poly Blackwire 3320 Stereo USB-C Headset +USB-C/A Adapter	8X219AA
Poly Blackwire 3325 Stereo Microsoft Teams Certified USB-C Headset +3.5mm Plug +USB-C/A Adapter	8X222AA
Poly Blackwire 3325 Stereo USB-C Headset +3.5mm Plug +USB-C/A Adapter	8X221AA
Poly Blackwire 3325 Microsoft Teams Certified USB-C Headset CUST1 Batch 2	8G0Z1AA
Poly Blackwire 3325 USB-C Headset CUST1 Batch 2	8G0Z0AA
Poly Blackwire 5210 USB-C Headset CUST1	9P7X5AA
Poly Blackwire 5220 Stereo USB-C Headset +3.5mm Plug +USB-C/A Adapter	8X231AA,
Poly Blackwire 5220 USB-C Headset CUST1	9P7X6AA
Poly Blackwire 8225 Stereo USB-C Headset +USB-C/A Adapter	8X223AA
Poly Blackwire 8225 Microsoft Teams Certified USB-C Headset CUST1 Batch 2	8G0Z5AA
Poly Blackwire 8225 USB-C Headset CUST1 Batch 2	8G0Z4AA
Poly Voyager 4310 Microsoft Teams Certified Headset +BT700 dongle +Charging Stand	77Y93AA
Poly Voyager 4310 Microsoft Teams Certified USB-A Headset +BT700 dongle	77Y91AA
Poly Voyager 4310 Microsoft Teams Certified USB-C Headset +BT700 dongle	77Y95AA
Poly Voyager 4310 USB-C Headset +BT700 dongle +Charging Stand	77Y96AA
Poly Voyager 4310 USB-C Headset +BT700 dongle	77Y94AA
Poly Voyager 4310-M Microsoft Teams Certified USB-C Headset +BT700 dongle +Charging Stand	77Y97AA
Poly Voyager 4310-M UC Headset +USB-A to USB-C Cable +BT700 dongle	7Y210AA
Poly Voyager 4310 Microsoft Teams Certified USB-C Headset +BT700 dongle	8G102AA
Poly Voyager 4310 USB-C Headset +BT700 dongle +Charging Stand CUST1	8G103AA
Poly Voyager 4310 USB-C Headset +BT700 dongle	8G101AA
Poly Voyager 4310-M Microsoft Teams Certified USB-C Headset +BT700 dongle +Charging Stand	8G104AA
Poly Voyager 4320 Microsoft Teams Certified Headset +BT700 dongle +Charging Stand	77Z00AA
Poly Voyager 4320 Microsoft Teams Certified USB-C Headset +BT700 dongle	77Z30AA
Poly Voyager 4320 Microsoft Teams Certified USB-C Headset +BT700 dongle	8G107AA
Poly Voyager 4320 USB-C Headset +BT700 dongle +Charging Stand	77Z31AA
Poly Voyager 4320 USB-C Headset +BT700 dongle +Charging Stand	8G109AA
Poly Voyager 4320 USB-C Headset +BT700 dongle	76U50AA
Poly Voyager 4320 USB-C Headset +BT700 dongle	8G106AA
Poly Voyager 4320-M +USB-A to USB-C Cable +BT700 dongle	7Y211AA

Poly Voyager 4320-M Microsoft Teams Certified Headset +BT700 dongle +Charging Stand	77Z32AA
Poly Voyager 4320-M Microsoft Teams Certified Headset +BT700 dongle +Charging Stand	8G110AA
Poly Voyager Surround 80 UC Microsoft Teams Certified USB-C Headset +USB-C/A Adapter Demo	9C6W5AA
Poly Voyager Surround 80 UC USB-C Headset +USB-C/A Adapter	8G7T9AA
Poly Voyager Surround 85 UC Microsoft Teams Certified USB-C Headset +USB-C/A Adapter +Charging Stand	8G7T8AA
Poly Voyager Surround 85 UC USB-C Headset +USB-C/A Adapter +Charging Stand	8G7T7AA
Poly DA75 USB to QD Black Adapter TAA	786C6AA
Poly DA85 USB to QD Black Adapter TAA	786C7AA
Poly DA85-M USB to QD Black Adapter TAA	786C8AA
Poly MDA524 USB-C	85Q24AA
Poly Voyager Focus 2 Microsoft Teams Certified USB-C-C Headset +USB-C/A Adapter +Charging Stand	9T9J6AA#AC3
Poly Voyager Focus 2 USB-C-C Headset +USB-C/A Adapter	9T9J3AA#AC3
Poly Voyager Focus 2 USB-C-C Headset +USB-C/A Adapter +Charging Stand	9T9J5AA#AC3
Poly Voyager Free 60+ UC Carbon Black Earbuds +BT700 USB-C Adapter +Touchscreen Charge Case	7Y8G4AA
Poly Voyager Free 60+ UC M Carbon Black Earbuds +BT700 USB-C Adapter +Touchscreen Charge Case	7Y8H0AA
Poly Voyager Legend 50 Headset UC	AT9M9AA
Poly Voyager Legend 50-M Headset UC (Poly Flamingo Comm) - New AMO	AJ8V4AA
Poly Voyager Surround 80 UC Microsoft Teams Certified USB-C Black Headset +USB-C/A Adapter	9D452AA
Poly Voyager Surround 80 UC Microsoft Teams Certified USB-C Headset +USB-C/A Adapter	8G7U0AA
Poly Voyager Surround 80 UC Microsoft Teams Certified USB-C Headset +USB-C/A Adapter	8G7U1AA

Security Hardware	**Part Number**
HP Combination Nano Cable Lock	63B28AA
HP Essential Combination Nano Cable Lock	63B31AA
HP Nano Keyed Cable Lock	1AJ39AA
HP Nano Master Keyed Cable Lock	1AJ40AA
HP SureKey Standard/Nano/Wedge Cable Lock[1]	6UW42AA

Note 1: Only Nano type lock head of 6UW42AA supports EliteBoard G1a Next Gen AI PC.

Docking	**Part Number**
HP Thunderbolt 4 100W G6 Dock	9X472UT
HP Thunderbolt 4 Ultra 180W G6 Dock	9X481UT
HP Thunderbolt 4 Ultra 280W G6 Dock	AW5M5UT
HP USB-C 100W G6 Dock	9X3V1UT

Mouse	**Part Number**
HP 685 Comfort Dual-Mode Mouse	8T6M0UT
HP 705 Rechargeable Wireless Mouse	AZ7B1AA

Memory	**Part Number**
HP 8GB DDR5-5600 SODIMM	B8CA1AA
HP 16GB DDR5-5600 SODIMM	B8CA2AA
HP 32GB DDR5-5600 SODIMM	B8CA3AA

Storage	**Part Number**
HP 512GB 2280 PCIe NVMe Value Solid State Drive	A94C2AA
HP 1TB 2280 PCIe NVMe Value Solid State Drive	A94C3AA

Change Log

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Date	Version History	Action	Description of Change
April 23, 2026	From v1 to v2	Update	MediaTek MT7925 and MediaTek RZ616 tables updated
July 18, 2026	From v2 to v3	Update	Fingerprint reader table updated
November 11, 2026	From v3 to v4	Update	HP IQ footnote updated
	From v4 to v5		
	From v5 to v6		
	From v6 to v7		
	From v7 to v8		
	From v8 to v9		
	From v9 to v10		
	From v10 to v11		
	From v11 to v12		
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	From v26 to v27		
	From v27 to v28		