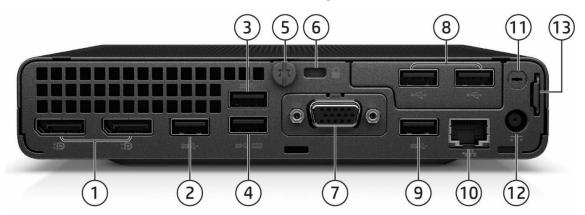
### HP EliteDesk 800 G6 Desktop Mini Business PC



- Type-C<sup>®</sup> SuperSpeed USB 10Gbps signaling rate port (charge support up to 5V/3A)
- 2. Type-A SuperSpeed USB 10Gbps signaling rate port
- 3. Type-A SuperSpeed USB 5Gbps signaling rate port (charge support up to 5V/2.1A)
- 4. Combo Audio Jack with CTIA and headset support
- 5. Dual-state power button
- 6. Hard drive activity light

### HP EliteDesk 800 G6 Desktop Mini Business PC



- 1. (2) Dual-Mode DisplayPort™ 1.4 (DP++)
- Type-A SuperSpeed USB 5Gbps signaling rate port
- Type-A SuperSpeed USB 5Gbps signaling rate port (Supporting wake from \$4/\$5 with keyboard/mouse connected and enabled in BIOS)
- Type-A SuperSpeed USB 10Gbps signaling rate port (Supporting wake from S4/S5 with keyboard/mouse connected and enabled in BIOS) Cover release thumbscrew
- 5. Cover release thumbscrew
- Standard cable lock slot (10 mm)
- (1) Flex Port 1, choice of:
  - HDMI 2.0a
- Fiber NIC (100Mbps and
- 1Gbps)1 VGA 2.0a
- DisplayPort™ 1.4
   SerialPort (AMO only)
  - Thunderbolt 3 (AMO only)
- Type-C™ SuperSpeed USB 10Gbps signaling rate port w/ DisplayPort™ Alt Mode and 100W Power Intake
- Intel® I225-LM 2.5 Gigabit Network Connection LOM (non-vPro)
- Dual Type A SuperSpeed USB 10Gbps signaling rate port

- (1) Flex Port 2, choice of:
  - VR Ready NVIDIA GTX 1660 Ti discrete GPU
  - Dual Type-A Hi-Speed USB 480Mbps signaling rate port
  - SerialS-232
- Type-A SuperSpeed USB 10Gbps signaling rate port
- 10. RJ45 network connector
- 11. External WLAN antenna opening
- 12. Power connector
- 13. Retractable Padlock loop

#### **Not Shown**

Slots

(1) Internal M.2 2230 connector for WLAN

(2) Internal M.2 SSD storage 2242 and 2280 connector

**Bays** 

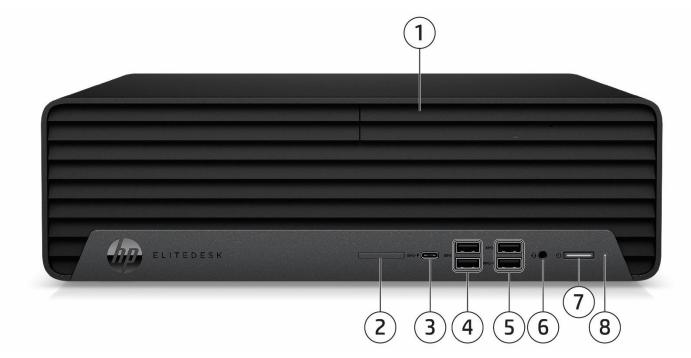
(1) 2.5- inch SATA drive Bay (not available on 95W processor)

Mounting

Support for

- VESA Sleeve Standalone - Ouick Release Bracket
- B300/B500 Mounting bracket
- Integrated Work Center Stand
- 1. Fiber NIC (100Mbps and 1Gbps) cards would not be available in some selected Europe countries and Korea.

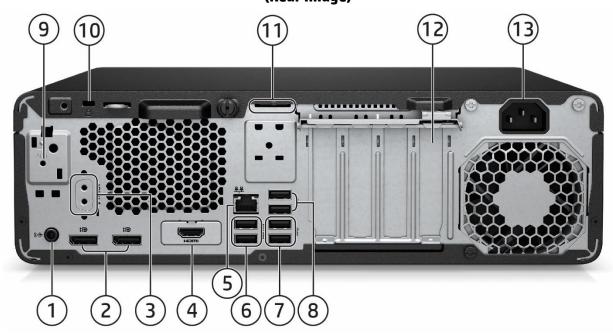
### **HP EliteDesk 800 G6 Small Form Factor Business PC**



- 1. Optional Slim optical drive
- 2. Optional SD 4 Card Reader
- 3. Type-C<sup>®</sup> SuperSpeed USB 10Gbps signaling rate port (charge support up to 5V/3A)
- 4. Type A SuperSpeed USB 10Gbps signaling rate port (2)
- 5. Type A SuperSpeed USB 5Gbps signaling rate port (2) (1 with charge support up to 5V/1.5A)

- 6. Combo Audio Jack with CTIA and headset support
- 7. Dual-state power button
- 8. Hard drive activity light

# HP EliteDesk 800 G6 Small Form Factor Business PC (Rear Image)



- 1. Audio line-out connector
- 2. Dual-Mode DisplayPort™ 1.4a (DP++) (2)
- 3. Optional Serial port (shown here not installed)
- 4. Optional port, choice of (shown here HDMI installed):
  - DisplayPort™
- Dual Type A SuperSpeed USB
- HDMI 2.0a
- 10Gbps signaling rate port
- VGA
- USB-C® SuperSpeed USB 10Gbps signaling rate port or serial port (USB-C® option has alt mode DisplayPort™ 1.4 and 15W output)
- 5. RJ45 network connector

- 6. Type A Hi-Speed USB 480 Mbps signaling rate port with wake from S4/S5 (2)
- 7. Type A SuperSpeed USB 10Gbps signaling rate port (2)
- 8. Type A SuperSpeed USB 5Gbps signaling rate port (2)
- 9. Optional Internal WLAN antenna cover (shown here not installed)
- 10. Standard cable lock slot
- Optional intrusion sensor/hood lock (shown here not installed)
- 12. Optional Thunderbolt PCIe card with USB-C® (shown here not installed)
- 13. Power cord connector

### **Not shown**

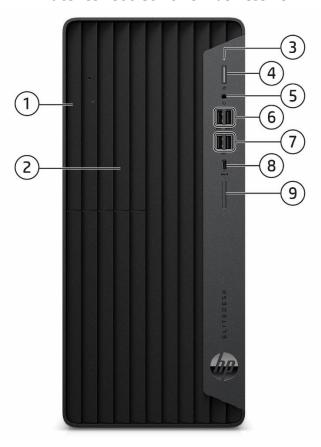
### Slots

- (2) PCI Express x16 graphics connectors; one wired as an x4
- (2) PCI Express x1
- (2) internal M.2 SSD storage (2242 and 2280 connector)
- (1) internal M.2 WLAN (2230 connector)

#### Bavs

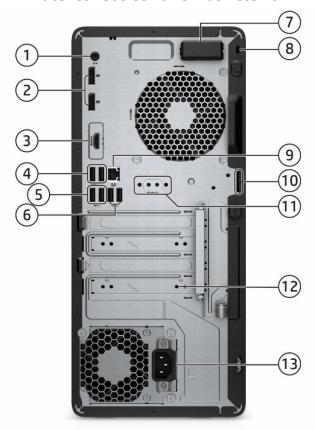
- (1) 2.5" internal storage drive bay
- (2) 3.5" internal storage drive bay (convertible to 2.5")
- (1) 9.5 mm slim optical drive bay

### **HP EliteDesk 800 G6 Tower Business PC**



- 1. Optional Slim optical drive
- 2. External 5.25-inch Half-Height Drive Bay (behind bezel)
- 3. Hard drive activity light
- 4. Dual-state power button
- 5. Combo Audio Jack with CTIA and headset support
- 6. Type A SuperSpeed USB 5Gbps signaling rate port (charge support up to 5V/1.5A) (2)
- 7. Type-A SuperSpeed USB 10Gbps signaling rate port (2)
- 8. Type-C® SuperSpeed USB 10Gbps signaling rate port (charge support up to 5V/3A)
- 9. Optional SD card 4.0 reader

### **HP EliteDesk 800 G6 Tower Business PC**



5.5

- Audio line-out jack for powered audio devices 1.
- Dual-Mode DisplayPort™ 1.4 (DP++) (2) 2.
- 3. Optional port, choice of (shown here HDMI installed):
  - DisplayPort™ 1.4
  - HDMI 2.0a
- Dual Type A SuperSpeed USB

VGA

- 10Gbps signaling rate port
- USB-C® SuperSpeed USB 10Gbps signaling rate port or serial port (USB-C® option has alt mode DisplayPort™ 1.4 and 15W output)
- Type A Hi-Speed USB 480 Mbps signaling rate port with wake from \$4/\$5 (2)
- Type A SuperSpeed USB 10Gbps signaling rate port (2) 5.

- 6. Type A SuperSpeed USB 5Gbps signaling rate port (2)
- 7. Optional Internal WLAN antenna cover (shown here installed)
- Standard cable lock slot 8.
- 9. RJ-45 (network) jack
- 10. Optional intrusion sensor/hood lock (shown here not installed)
- 11. Optional serial port (shown here not installed)
- 12. Optional Thunderbolt PCIe card with USB-C® (shown here not installed)
- 13. Power cord connector

### Not shown

### **Slots**

- (2) PCI Express x16 graphics connectors; one wired as an x4
- (2) PCI Express x1
- (2) internal M.2 SSD storage (2242 and 2280 connector)
- (1) internal M.2 WLAN (2230 connector)

### Bays

- (1) 2.5" internal storage drive bay
- (2) 3.5" internal storage drive bay (convertible to 2.5")
- (1) 5.25" half-height drive bay
- (1) 9.5mm slim optical drive bay



Overview

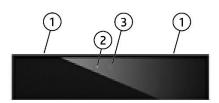
### HP EliteOne 800 G6 24 & 27 All-in-One\*



### Camera (optional)

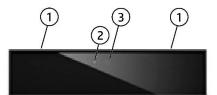
### optional) 2. Speakers (optional)

### HD Webcam (optional)



- 1. Dual Microphones
  - 2. Webcam Light
  - 3. HD Webcam

### **5MP Webcam (optional)**



- 1. Dual Microphones
  - 2. Webcam Light
  - 3. 5MP Webcam

### 5MP Webcam with Infrared (IR) Sensors (optional)



- 1. Dual Microphones
- 2. Webcam Light
- 3. IR/5MP Webcam
  - 4. IR Light

\*Available Options: Touch, Non-Touch, HP Sure View (24" Display Only), and Discrete Graphics

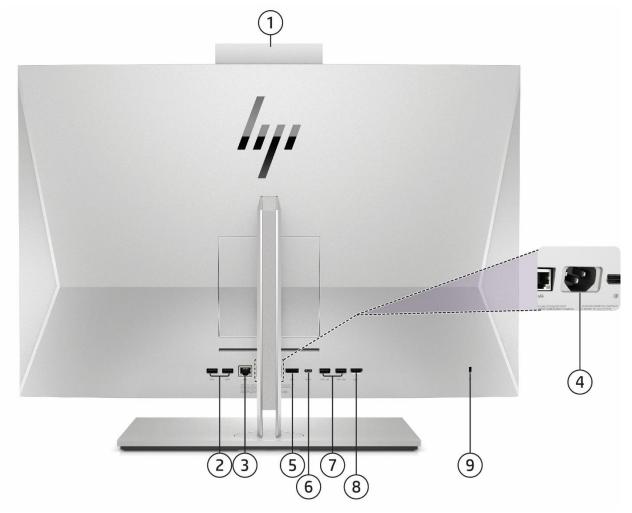


### HP EliteOne 800 G6 24 & 27 All-in-One\*



- 1. Type-A SuperSpeed USB 10Gbps signaling rate port (charge support up to 5V/3A)
- 2. Type-C® SuperSpeed USB 10Gbps signaling rate port (charge support up to (5V/3A)
- 3. Combo Audio Jack with CTIA and OMTP headset Support

### HP EliteOne 800 G6 24 & 27 All-in-One

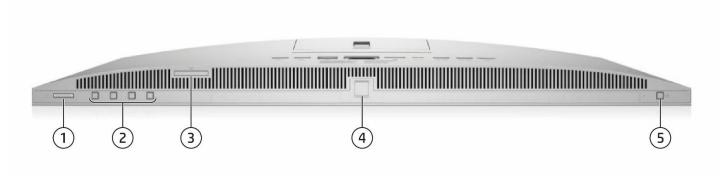


Rear components and rear ports

- 1. Camera (optional)
- 2. Type-A SuperSpeed USB 10Gbps signaling rate port (x2)
- 3. RJ-45 network connector/jack
- 4. Power Connector
- 5. Dual-Mode DisplayPort™1.4 (DP++)

- 6. Type-C® SuperSpeed USB 10Gbps signaling rate port (charge support up to (5V/3A)
- 7. Type-A SuperSpeed USB 5Gbps signaling rate port (x2)
- 8. HDMI-in 2.0a connector
- 9. Standard cable lock slot

### HP EliteOne 800 G6 24 & 27 All-in-One



### 1. Dual-State Power button

- 2. OSD control buttons
- 3. SD card reader 4.0 (optional)

### Bottom

- 4. Fingerprint Sensor (optional)
- 5. HP Sure View Button (optional on 23.8" only)

### **Not shown**

### **Slots**

- (1) internal M.2 PCIe x1 connector for optional wireless NIC
- (2) internal M.2 PCIe x4 connector for optional m.2 SSD

#### VESA

Support for VESA 100 mounting system on back of PC chassis (mounting hardware sold separately)



### **Features**

#### AT A GLANCE

- Choice of four form factors: Tower, Small Form Factor, Desktop Mini and All-In-One
- HP developed and engineered UEFI V2.7 BIOS supporting security, manageability and software image stability
- Intel® Q470 chipset supporting Intel® 10<sup>th</sup> generation Core™ processors, featuring integrated Intel® UHD Graphics and Intel® vPro™ Technology (available with Core i3, Core i5, Core i7 and Core i9 processors) <sup>1,4</sup>
- Processors up to 65W on AiO
- Processors up to 95W on DM
- Processors up to 125W on DM, TWR and SFF
- Intel® Optane™ Memory H10 with Solid State Storage
- Intel® UHD graphics with optional discrete graphics configure systems to up to 7 monitors (TWR, SFF and DM 35W)
- Intel® Ethernet Connection I219LM GbE LOM integrated network connection
- Intel® Wi-Fi 6 + BT5 (802.11AX 2x2)
- DDR4 Synchronous Dynamic Random Access Memory (SDRAM) (Transfer rates up to 2933 MT/s)<sup>2</sup>
- Support for up to 7 monitors via two standard DisplayPort™ 1.4 ports,a configurable Flex i/o port for video options and a
  discrete graphics card on TWRs, SFFs and DMs. AiO supports up to two additional monitors via DisplayPort™ or Type-C®
  USB in alternate mode.
- Configurable FlexPort which provides the following choices: HDMI 2.0, Serial, VGA, DisplayPort™ 1.4, or USB Type-C™ with DisplayPort™ 1.4 (USB Type-C® with DisplayPort™ 1.4 with Power Delivery {PD] on DMs), Thunderbolt 3.0 (port on DM, PCIe card on TWR, SFF) and Dual USB Type-A for (TWRs, SFFs and DMs). See Ports section for port availability by platform. FlexPort not supported on AIO.
- 2<sup>nd</sup> FlexPort available for configuration on the HP EliteDesk G6 Desktop Minis with the following ports: Serial, and Dual USB Type-A. FlexPort not supported on AIO.
- Configurable NVIDA® GeForce®VR ready discrete graphics card with (3) mini-DisplayPorts and (1) micro-HDMI video port for DM<sup>5</sup> to support up to (7) monitors with minimum 4K resolution and option to connect up to (3) monitors with 5K resolution via graphics card.
- Configurable AMD® Radeon and NVIDA® GeForce® VR ready discrete graphics on AiO.5
- Configurable AMD® Radeon, NVIDA® GeForce® and NVIDA® Quadro® VR ready discrete graphics on TWR 5
- Compatibility with HP Mini-In-One 24 Display (800 G6 DM with 100W USB-C +PD option card)
- Compatible with HP Reverb VR Headset<sup>8</sup> (AiO and TWR)
- Models can be configured with multiple data drives in a RAID array and support RAID 1 configured from factory.
- Zoom Rooms edition available (AiO, DM) with Win IoT
- Audio by Bang & Olufsen (AiO)
- Intel<sup>®</sup> Unite<sup>™</sup> available (AiO, DM)<sup>6</sup>
- Integrated Low Blue Light Panels on AiO (excludes Sure View and Touch Models)
- Enhanced Security whit HP Security Suite (Refer to Security Section for details)
- ENERGY STAR® certified. EPEAT® 2019 registered where applicable. EPEAT® registration varies by country. See http://www.epeat.net for registration status by country. According to IEEE 1680.1-2018.<sup>7</sup>
- CCC, CECP and SEPA Certified (TWR/SFF/DM/AiO)
- TCO Edge for AiO (TCO Edge not available for models with HP Sure View)
- TCO (TWR/SFF/DM)
- PC chassis and all internal components and modules are manufactured with low halogen content<sup>3</sup>
- Dust filter available for following platforms (35W DM, SFFs and TWRs)
- All form factors undergo up to 13 MIL-STD tests<sup>9</sup>
- Protected by HP Services, including limited warranties up to 3-3-3 (terms and conditions vary by country; certain restrictions and exclusions apply); Care Packs available with up to 5 years Next Business Day Onsite Hardware Support
- Compliance with CE (Class B) / FCC (Class B) / UL (UL60950-1 /UL62368-1) / CSA (CSA C22.2 No.60950-1-07 / CSA C22.2 No.62368-1-14) / ICES-003 / CCC / VCCI (Class B) / KCC (Class B)
- Fiber NIC (100Mbps and 1Gbps) cards would not be available in some selected European countries and Korea.

1. Multi core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.

2. Maximum transfer rate only available with Intel® Core i7 and Core i9 Processors.



### **Features**

- 3. External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.
- 4. Some functionality of vPro technology, such as Intel Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel vPro technology is dependant on 3rd party software providers. Compatibility of this generation of Intel vPro technology-based hardware with with future "virtual appliances" is yet to be determined.
- 5. VR-ready as optional feature, requires specific configuration to support.
- 6. Intel<sup>®</sup> Unite<sup>™</sup> must be configured at the factory.
- 7. Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit http://www.epeat.net for more information.
- 8. Availability may vary by country.
- 9. MIL-STD drop test not performed for All-in-Ones. 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.

### NOTE: See important legal disclosures for all listed specs in their respective feature's sections

### **PRODUCT NAME**

HP EliteDesk 800 G6 Tower PC

HP EliteDesk 800 G6 Small Form Factor PC

HP EliteDesk 800 G6 Desktop Mini PC

HP EliteOne 800 G6 24 All-in-One PC

HP EliteOne 800 G6 27 All-in-One PC

### **OPERATING SYSTEM**

**Preinstalled** Windows® 10 Pro 64<sup>1</sup>

Windows® 10 Pro 64 (National Academic License)2

Windows® 10 Home 641

Windows® 10 Home 64 Single Language1

**FreeDOS** 

**Web-supported only** Windows® 10 Enterprise 64<sup>1</sup>

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

**NOTE:** Your product does not support Windows 8 or Windows 7. In accordance with Microsoft's support policy, HP does not support the Windows® 8 or Windows 7 operating system on products configured with Intel® and AMD® 7th generation and forward processors or provide any Windows® 8 or Windows 7 drivers on http://www.support.hp.com. A full list of HP products and the Windows 10 versions tested is available on the HP support website. https://support.hp.com/us-en/document/c05195282

### SUPPORTED VERSIONS

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

#### **CHIPSET**

	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u> AiO</u>
Intel® Q470 PCH-H− vPro™	<u>x</u>	<u>X</u>	<u>x</u>	<u>X</u>



### Features

### **PROCESSORS**

Intel® 10 <sup>th</sup> Generation Core™ Processors	<u>DM</u>	<u>SFF</u>	TWR	<u>AiO</u>
Intel® Core™ i9 10900K Processor with Intel® UHD Graphics 630 (3.7GHz, up to 5.3 GHz with Intel® Turbo Boost³, 20MB cache, 10 cores) 125W¹,²,⁴ Supports Intel® vPro™ Technology⁴	х	X	х	
Intel® Core™ i9 10900 Processor with Intel® UHD Graphics 630 (2.8GHz, up to 5.2 GHz with Intel® Turbo Boost³, 20MB cache, 10 cores) 65W¹,² Supports Intel® vPro™ Technology⁴	х	x	х	Х
Intel® Core™ i9 10900T Processor with Intel® UHD Graphics 630 (1.9GHz, up to 4.6 GHz with Intel® Turbo Boost³, 20MB cache, 10cores) 35W¹,² Supports Intel® vPro™ Technology⁴	х			
Intel® Core™ i7 10700K Processor with Intel® UHD Graphics 630 (3.8 GHz, up to 5.1 GHz with Intel® Turbo Boost³, 16MB cache, 8 cores) 125W¹,²,⁴ Supports Intel® vPro™ Technology⁴	X	x	х	
Intel® Core™ i7 10700 processor with Intel® UHD Graphics 630 (2.9 GHz, up to 4.8 GHz with Intel® Turbo Boost³, 16 MB cache, 8 cores) 65W¹,² Supports Intel® vPro™ Technology⁴	х	x	х	х
Intel® Core™ i7 10700T Processor with Intel® UHD Graphics 630 (2.0 GHz, up to 4.5 GHz with Intel® Turbo Boost³,16MB cache, 8 cores) 35W¹,² Supports Intel® vPro™ Technology⁴	х			
Intel® Core™ i5 10600K processor with Intel® UHD Graphics 630 (4.1 up to 4.8 GHz with Intel® Turbo Boost³, 12 MB cache, 6 cores) 125W <sup>1, 2, 4</sup> Supports Intel® vPro™ Technology⁴	X	x	х	
Intel® Core™ i5 10600 processor with Intel® UHD Graphics 630 (3.3 GHz, 12 MB cache, 6 cores) 65W <sup>1, 2</sup> Supports Intel® vPro™ Technology <sup>4</sup>	Х	X	х	X
Intel® Core™ i5 10600T processor with Intel® UHD Graphics 630 (2.4 GHz 12 MB cache, 6 cores) 35W <sup>1, 2</sup> Supports Intel® vPro™ Technology <sup>4</sup>	х			
Intel® Core™ i5 10500 processor with Intel® UHD Graphics 630 (3.1 GHz, 12 MB cache, 6 cores) 65W <sup>1, 2</sup> Supports Intel® vPro™ Technology <sup>4</sup>	X	x	x	x
Intel® Core™ i5 10500T processor with Intel® UHD Graphics 630 (2.3 GHz, 12 MB cache, 6 cores) 35W <sup>1, 2</sup> Supports Intel® vPro™ Technology⁴	х			
Intel® Core™ i5 10400 processor with Intel® UHD Graphics 630 (2.9 GHz, 12 MB cache, 6 cores) 65W <sup>1, 2</sup>	Х	Х	Х	X
Intel® Core™ i5 10400T processor with Intel® UHD Graphics 630 (2.0 GHz, 12 MB cache, 6 cores) 35W <sup>1, 2</sup>	х			
Intel® Core™ i3 10325 processor with Intel® UHD Graphics 630 (3.9 GHz, 8MB cache, 4 cores) 65W <sup>1, 2</sup>	X	х	х	Х
Intel® Core™ i3 10320 processor with Intel® UHD Graphics 630 (3.8 GHz, 8 MB cache, 4 cores) 65W¹	Х	X	х	Х



### **Features**

	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
Intel® Core™ i3 10305 processor with Intel® UHD Graphics 630 (3.8 GHz, 8MB cache, 4 cores) 65W¹	Х	Х	X	X
Intel® Core™ i3 10305T processor with Intel® UHD Graphics 630 (3.0 GHz, 8MB cache, 4 cores) 35W¹	X			
Intel® Core™ i3 10300 processor with Intel® UHD Graphics 630 (3.7 GHz, 8 MB cache, 4 cores) 65W¹	X	Х	Х	Х
Intel® Core™ i3 10300T processor with Intel® UHD Graphics 630 (3.0 GHz, 8 MB cache, 4 cores) 35W¹	X			
Intel® Core™ i3 10105 processor with Intel® UHD Graphics 630 (3.7 GHz, 6MB cache, 4 cores) 65W¹	X	Х	Х	Х
Intel® Core™ i3 10105T processor with Intel® UHD Graphics 630 (3.0 GHz, 6MB cache, 4 cores) 35W¹	X			
Intel® Core™ i3 10100 processor with Intel® UHD Graphics 630 (3.6 GHz, 6 MB cache, 4 cores) 65W¹	X	Х	Х	Х
Intel® Core™ i3 10100T processor with Intel® UHD Graphics 630 (3.0 GHz, 6 MB cache, 4 cores) 35W¹	Х			

<sup>1:</sup> Multi-core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a mea configuration surement of higher performance.

2. Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system.

**NOTE:** Memory speed 2666 and 2933 MT/s can be achieved via two UDIMMs per channel (2DPC) when populated with the same part number.

Intel® Pentium® Processors	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
Intel® Pentium® Gold G6605 processor with Intel® UHD Graphics 630 (4.3GHz, 4 MB cache, 2 cores) 65W¹	Х	Х	Х	Х
Intel® Pentium® Gold G6600 processor with Intel® UHD Graphics 630 (4.2 GHz, 4 MB cache, 2 cores) 65W1	Х	X	X	Х
Intel® Pentium® Gold G6505 processor with Intel® UHD Graphics 630 (4.2GHz, 4 MB cache, 2 cores) 65W¹	Х	X	X	Х
Intel® Pentium® Gold G6505T processor with Intel® UHD Graphics 630 (3.6GHz, 4 MB cache, 2 cores) 35W1	Х			
Intel® Pentium® Gold G6500 processor with Intel® UHD Graphics 630 (4.1 GHz, 4 MB cache, 2 cores) 65W1	X	X	X	Х
Intel® Pentium® Gold G6500T processor with Intel® UHD Graphics 630 (3.5GHz, 4 MB cache, 2 cores) 35W1	Х			
Intel® Pentium® Gold G6405 processor with Intel® UHD Graphics 610 (4.1GHz, 4 MB cache, 2 cores) 65W¹	Х	Х	Х	Х
Intel® Pentium® Gold G6405T processor with Intel® UHD Graphics 610 (3.5GHz, 4 MB cache, 2 cores) 35W1	X			
Intel® Pentium® Gold G6400 processor with Intel® UHD Graphics 610 (4.0 GHz, 4 MB cache, 2 cores) 65W1	Х	X	Х	Х
Intel® Pentium® Gold G6400T processor with Intel® UHD Graphics 610 (3.4 GHz, 4 MB cache, 2 cores) 35W¹	X			



<sup>3.</sup> Intel® Turbo Boost technology requires a PC with a processor with Intel Turbo Boost capability. Intel Turbo Boost performance varies depending on hardware, software and overall system. See http://www.intel.com/technology/turboboost for more information.

<sup>4.</sup> Some functionality of vPro technology, such as Intel Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel vPro technology is dependent on 3rd party software providers. Compatibility with future "virtual appliances" is yet to be determined.

### Features

1: Multi-core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a mea configuration surement of higher performance.



**Features** 

### **GRAPHICS**

ntegrated Intel® Graphics	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
Intel® UHD Graphics 630 (integrated on 10 <sup>th</sup> gen Core i9/i7/i5/i3, Pentium® Gold G6600, G6500)	Х	Х	X	Х
Intel® UHD Graphics 610 (integrated on 10 <sup>th</sup> gen Pentium® Gold G6400, Celeron® G5900, G5920)	х	Х	х	Х

ptional Discrete Graphics Solutions	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
NVIDIA® GeForce® RTX 2080 Super 8GB FH 3DP HDMI Graphics Card*			X	
NVIDIA® GeForce® RTX 2070 Super 8GB FH 3DP HDMI Graphics Card				X
NVIDIA® GeForce® RTX 2060 Super 8GB FH DP HDMI DVI-D Graphics Card*			Х	
NVIDIA® Quadro P2200 5GB 4DP Graphics Card			X	
NVIDIA® Quadro P1000 4GB 4mDP Graphics Card			X	
NVIDIA® Quadro P620 2GB Graphics Card		X	Х	
NVIDIA® Quadro P400 2GB Graphics Card		X	X	
NVIDIA® GeForce® GTX 1660Ti 6GB HMDI, DP Graphics Card**	X			
AMD® Radeon™ RX 5300M 3GB NGC Graphics Card				Х
AMD® Radeon™ RX 550X 4GB DP HDMI Graphics Card		X	Х	
AMD® Radeon™ R7 430 2GB GDDR5 64bit DP+VGA***		X	X	
AMD® Radeon™ R7 430 2GB GDDR5 64bit 2DP		X	X	

<sup>\*</sup>Requires 550W chassis

**NOTE:** The TWR can support a single discrete graphics card up to 300W with a 550W Power Supply.

ters and Cables	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
HP DisplayPort™ Cable	Х	Х	Х	X
HP DisplayPort™ to DVI-D Adapter	Х	Х	Х	X
HP DisplayPort™ to HDMI True 4K Adapter	Х	Х	Х	X
HP DisplayPort™ to VGA Adapter	Х	Х	Х	X
HP USB to Serial Port Adapter	Х	Х	Х	X
HP USB-C® to HDMI 4K Adapter	Х	Х	Х	X
HP USB-C® to DisplayPort Adapter	Х	Х	Х	X
HP DVI Cable	Х			X
HP HDMI Standard Cable Kit (HDMI)		Х	Х	X
HP DVI Cable Kit	Х			X
Micro HDMI to HDMI Adapter	Х	Х	Х	
Mini DisplayPort to DisplayPort Adapter	X			



<sup>\*\*</sup> Only available on the Desktop Mini with a 35W Processor and supports (3) Mini DP 1.4 Ports and (1) Micro –HDMI 2.0 port in order to drive up to 7 displays directly on the Desktop Mini.

<sup>\*\*\*</sup>Not available in all regions

**Features** 

### **STORAGE**

JIORNUL				
3.5 inch SATA Hard Disk Drives (HDD)	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
500GB 7200RPM 3.5in SATA HDD		X	X	
1TB 7200RPM 3.5in SATA HDD		X	X	
2TB 7200RPM 3.5in SATA HDD		Х	Х	
2.5 inch SATA Hard Disk Drives (HDD)	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
500GB 7200RPM 2.5in SATA HDD	X	X	Х	
1TB 7200RPM 2.5in SATA HDD	Х	X	Х	
2TB 5400RPM 2.5in SATA HDD	Х	X	Х	
500GB 7200RPM 2.5in Self Encrypted OPAL2 SATA HDD*	Х	Х	Х	
500GB 7200RPM 2.5in Self Encrypted Federal Information Processing Standard SATA HDD*	Х	Х	х	
M.2 PCIe NMVe Solid State Drives (SSD)	<u>DM</u>	<u>SFF</u>	TWR	<u>AiO</u>
256GB M.2 2280 PCIe NVMe SSD	X	X	X	X
512GB M.2 2280 PCIe NVMe SSD	Х	Х	Х	Х
128GB M.2 2280 PCIe NVMe Three Layer Cell SSD	Х	Х	Х	Х
256GB M.2 2280 PCIe NVMe Three Layer Cell SSD	Х	Х	Х	Х
512GB M.2 2280 PCIe NVMe Three Layer Cell SSD	Х	Х	Х	Х
1TB M.2 2280 PCIe NVMe Three Layer Cell SSD	Х	Х	Х	Х
2TB M.2 2280 PCIe NVMe Three Layer Cell SSD	Х	Х	Х	Х
256GB M.2 2280 PCIe NVMe Self Encrypted OPAL2 Three Layer Cell SSD*	Х	Х	Х	X
512GB M.2 2280 PCIe NVMe Self Encrypted OPAL2 Three Layer Cell SSD*	Х	X	X	Х
256GB Intel® Optane™ Memory H10 with Solid State Storage*	Х	Х	Х	Х
512GB Intel® Optane™ Memory H10 with Solid State Storage*	X	Х	Х	Х
Optical Disc Drives	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
HP 9.5mm Slim DVD-ROM Drive		X	X	
HP 9.5mm Slim DVD Writer Drive		Х	Х	
HP 9.5mm Slim Blu-Ray Writer Drive		Х	Х	
Media Card Reader	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
SD 4.0 with 5-in-1 Interface (Supports SD, SDXC, SDHC, UHS-I, UHS-II)		Х	Х	Х

NOTE: For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.



**Features** 

### **MEMORY**

Memory Type	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
DDR4-2933 (Transfer rates up to 2933 MT/s), 64 GB, 2 SODIMM <sup>1</sup>	Х			X
DDR4-2666 (Transfer rates up to 2666 MT/s), 64 GB, 2 SODIMM	Х			Х
DDR4-2933 (Transfer rates up to 2933 MT/s), 128 GB, 4 DIMM <sup>1</sup>		X	X	
DDR4-2666 (Transfer rates up to 2666 MT/s), 128 GB, 4 DIMM		X	Х	

lemory Configuration	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u> AiO</u>
4 GB (1 x 4 GB)	X	X	X	Х
8 GB (2 x 4 GB)	X	X	X	Х
8 GB (1 x 8 GB)	X	X	X	Х
16 GB (2 x 8 GB)	X	X	X	X
16 GB (1 x 16 GB)	X	X	X	X
32 GB (2 x 16 GB)	X	X	X	Х
32 GB (4 x 8 GB)		X	X	
32 GB (1 x 32 GB)	X	X	X	X
64 GB (4 x 16 GB)		X	X	
64 GB (2 x 32 GB)	X	X	X	Х
128 GB (4 x 32 GB)		X	X	

<sup>1.</sup> Only available with Intel Core i7 and Core i9 processors.

**NOTE:** For systems configured with more than 3 GB of memory and a 32-bit operating system, all memory may not be available due to system resource requirements. Addressing memory above 4 GB requires a 64-bit operating system.

Memory modules support data transfer rates up to 2666 MT/s or 2933 MT/s as depending on processor config; with 1 DIMM per channel. Additional DIMM loading on any channel may impact maximum memory speed. Actual data rate is determined by the system's configured; See processor specifications for supported memory data rate.

**NOTE:** All memory slots are customer accessible / upgradeable.

### **NETWORKING/COMMUNICATIONS**

Ether	net (RJ-45)	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
	Intel® I219-LM 1 Gigabit Network Connection LOM (vPro)	X	X	Х	X
	Intel® I225LM 2.5 Gigabit Network Connection LOM (optional)	X			
	Intel® Ethernet I210-T1 PCIe x1 Gb Network Interface Card (optional)		Х	Х	

Wireless <sup>1</sup>	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
Intel® Wi-Fi 6 AX201 + BT5 (802.11AX 2x2 vPro, supporting gigabit file transfer speed)	X	X	X	X
Intel® Wi-Fi 6 AX201 + BT5 (802.11AX 2x2 non-vPro, supporting gigabit file transfer speed)	х	X	х	х
Realtek RTL8822CE 802.11ac 2x2 Wi-Fi® + BT5	X	Х	Х	X

<sup>1.</sup> Wireless access point and Internet service required and not included. Availability of public wireless access points limited. The specifications for the 802.11ax WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the PC to communicate with 802.11ax WLAN devices. Wi-Fi 6 requires a wireless router, sold separately, that supports 802.11ax (Wi-Fi 6). Only available in countries where 802.11ax is supported.





### **KEYBOARDS AND POINTING DEVICES**

oards	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
HP Wired Desktop 320K Keyboard	Х	Х	X	X
HP USB Premium Keyboard	Х	X	X	Х
HP USB and PS/2 Washable Keyboard <sup>1</sup>	Х	Х	X	Х
HP USB Business Slim Smart Card (CCID) Keyboard	Х	Х	X	Х
HP USB Keyboard	Х	Х	X	Х
HP PS/2 Business Slim Keyboard <sup>1</sup>		X	X	
HP Wireless Business Slim Keyboard and Mouse	Х	Х	X	Х
HP USB Business Slim Antimicrobial Keyboard <sup>2</sup>	Х	Х	X	Х
HP Wireless Premium Keyboard and Mouse	Х	Х	X	Х
HP USB Keyboard and Mouse Healthcare Edition	Х	Х	Х	Х

Mouse	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
HP Wired Desktop 320M Mouse	X	X	Х	X
HP PS/2 Mouse <sup>1</sup>		X	Х	
HP USB Optical Mouse	X	X	Х	X
HP USB Premium Mouse	X	X	Х	X
HP USB 1000dpi Laser Mouse	X	Х	Х	X
HP USB and PS/2 Washable Mouse <sup>1</sup>	X	Х	Х	
Antimicrobial USB Mouse <sup>2</sup>	X	X	Х	X
HP USB Hardened Mouse <sup>2</sup>	X	X	Х	X
HP USB Fingerprint Reader Mouse	X	X	Х	X

<sup>1.</sup> PS/2 port not available on EliteOne 800 G6 AiOs and not available on any EliteDesk 800 G6 DMs

<sup>2.</sup> Not available in all regions

### **Features**

### **SECURITY**

	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
TPM 2.0 (FW: 7.85) endpoint security controller (Infineon SLB9670) shipped with Windows 10. Common Criteria EAL4+ Certified. FIPS 140-2 Level 2 Certified.	х	х	x	X
Solenoid Lock & Intrusion Sensor		X	Х	
Intrusion Sensor for DM/AiO (integrated in the PCA, can be enabled/disabled through BIOS)	X			х
Support for chassis cable lock devices	<b>X</b> (10 mm or smaller)	х	X	х
Support for chassis padlocks devices	Х	X	Х	
HP Fingerprint Sensor (standard on 800 G6 AiO touch models and optional on non-touch models)				х
SATA port disablement (via BIOS)	X	X	Х	
Serial, USB enable/disable (via BIOS)	X	X	Х	X
Intel® Identify Protection Technology (IPT) <sup>1</sup>	X	X	Х	X
Serial, parallel, USB enable/disable (via BIOS)	Х	X	Х	X
Optional USB Port Disable at factory (user configurable via BIOS)	X	X	Х	X
Removable media write/boot control	Х	X	Х	X
Power-on password (via BIOS)	Х	X	Х	X
Setup password (via BIOS)	Х	X	Х	X

<sup>1.</sup> Models configured with Intel® Core™ processors have the ability to utilize advanced security protection for online transactions. IPT, used in conjunction with participating web sites, provides double identity authentication by adding a hardware component in addition to the usual user name and password. IPT is initialized through an HP Client Security module.

### **PORTS**

I/O Ports – Int	ernal Ports	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>	
Internal S	SATA storage connector(s)	N/A	3	4	N/A	
Internal S Power)	SATA storage connector (Data and	1	N/A	N/A	N/A	

**NOTE**: For Desktop Mini with M.2 Storage config, there will be no SATA drive bracket. If you plan to use or upgrade the storage with any 2.5" SATA drive, please select a DM SATA Drive Bracket (available as both factory configured and after market option).

Standard User Accessible Ports	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
Type-A Hi-Speed USB		2 (rear)	2 (rear)	
Type-A SuperSpeed USB 5 Gbps signaling rate port	1 (front) 2 (rear)	2 front (1 fast charging), 2 rear	2 front (1 fast charging), 2 rear	2 rear
Type-A SuperSpeed USB 10 Gbps signaling rate port	1 (front) 2 (rear)	2 front; 2 rear	2 front; 2 rear	2 rear 1 side
Type-C® SuperSpeed USB 10 signaling rate Gbps port	1 (front)	1 (front)	1 (front)	1 rear 1 side



### Features

Video	2 DisplayPort™ 1.4 (rear)	2 DisplayPort™ 1.4 (rear)	1 DisplayPort™ 1.4 (rear)	For models with integrated graphics:  1 DisplayPort™ 1.4 (rear)  1 USB Type-C® with alt mode display or 15W output) (rear)  1 HDMI-In (rear)  For models with discrete graphics: 1 DisplayPort™ 1.4 (rear)  1 USB Type-C® with alt mode display or 15W output) (rear) 1 HDMI-In (rear)
Audio	1 Combo Audio Jack with CTIA and headset support (front)	1 Universal Audio Jack with CTIA headset support (front)); 1 Audio-out (rear),	1 Universal Audio Jack with CTIA headset support (front)); 1 Audio-out (rear),	1 CTIA/OMTP UAJ (side)
Network Interface	1 RJ45 (rear)	1 RJ45 (rear)	1 RJ45 (rear)	1 RJ45 (rear)

1) Flexible Port 1, choice of <u>one</u> of he following	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
Type-A SuperSpeed USB 5 Gbps signaling rate port	2 (rear)	2 (rear)	2 (rear)	N/A
Type-C <sup>®</sup> SuperSpeed USB 10Gbps signaling rate port	1 SuperSpeed USB 10Gbps signaling rate port w/ DisplayPort™ Alt Mode and power intake via USB Type-C® Power Delivery up to 100W (rear)	1 SuperSpeed USB 10Gbps signaling rate port w/ DisplayPort™ Alt Mode (rear)	1 SuperSpeed USB 10Gbps signaling rate port w/ DisplayPort™ Alt Mode (rear)*	N/A
Thunderbolt™ 3	1 (rear)	1 (rear)	1 (rear)	N/A
Video	1 DisplayPort™ 1.4 <u>or</u> HDMI 2.0 <u>or</u> VGA (rear)	1 DisplayPort™ 1.4 <u>or</u> HDMI 2.0 <u>or</u> VGA (rear)	1 DisplayPort™ 1.4 <u>or</u> HDMI 2.0 <u>or</u> VGA (rear)	N/A
Serial (RS-232)	N/A	1 (rear)	1 (rear)	N/A
Fiber NIC Adapter	(1) 100Mbps NIC (rear) (1) 1 Gbps NIC (rear)			N/A
RJ-45 Ethernet NIC	(1) 2.5GbE(rear)			N/A

(1) Flexible Port 2, choice of <u>one</u> of the following:	<u>DM</u>	<u>SFF</u>	<u>MT</u>	<u>AiO</u>
Type-A USB	2 Hi-Speed USB (rear)			N/A
Serial (RS-232)	1 (rear)			N/A
Discrete Graphics	1 (rear)			N/A



**NOTE**: For Desktop Mini with M.2 Storage config, there will be no SATA drive bracket. If you plan to use or upgrade the storage with any 2.5" SATA drive, please select a DM SATA Drive Bracket (available as both factory configured and after market option).

lots	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
M.2 PCIe	(1) M.2 PCle x1			
	2230 (for WLAN)	2230 (for WLAN)	2230 (for WLAN)	2230 (for WLAN)
	(2) M.2 PCIe x4	(2) M.2 PCle x4	(2) M.2 PCIe x4	(2) M.2 PCIe x4
	2280/2230 Combo	2280/2230 Combo	2280/2230 Combo	2280 Combo (for
	(for storage)	(for storage)	(for storage)	storage)
PCI Express v3.0 x1	N/A	2	2	N/A
PCI Express v3.0 x16 (wired as x4)	N/A	1	1	N/A
PCI Express v3.0 x16	N/A	1 (up to 75W)	1 (up to 300W)	N/A

Bays	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>
5.25" Half Height (External)	N/A	N/A	1	N/A
9mm Slim Optical Disc Drive (ODD)	N/A	1	1	N/A
SD Card Reader	N/A	1	1	1
2.5" Internal Storage Drive	1	1	1	N/A
3.5" Internal Storage Drive	N/A	2	2	N/A

SATA 2.5" internal storage drive cannot be selected if 2nd M.2, discrete graphic card, or 95W processor is selected.



### **USB SPECIFICATION AND MARKETING NAME MAPPING TABLE**

Marketing Name	Technical Terminology
Hi-Speed USB 480Mbps signaling rate	USB 2.0
SuperSpeed USB 5Gbps signaling rate	USB 3.2 Gen 1
SuperSpeed USB 10Gbps signaling rate	USB 3.2 Gen 2
SuperSpeed USB 20Gbps signaling rate	USB 3.2 Gen 2x2



### **SOFTWARE COMPONENTS AND APPLICATIONS WITH WINDOWS**

#### BIOS

HP BIOSphere Gen6<sup>1</sup>
HP DriveLock & Automatic DriveLock<sup>2</sup>
BIOS Update via Network
HP Secure Erase<sup>3</sup>
Absolute Persistence Module<sup>4</sup>
Pre-boot Authentication
HP Wake on WLAN

#### Software

HP Desktop Support Utility
HP JumpStart
HP Privacy Settings
HP Setup Integrated OOBE
HP Support Assistant<sup>5</sup>
HP Noise Cancellation Software
Buy Office (sold separately)

### **Manageability Features**

HP Driver Packs7

HP Smart Support<sup>6</sup>

HP System Software Manager (SSM) (download)

HP BIOS Config Utility (BCU) (download)

**HP Client Catalog (download)** 

HP Image Assistant Gen (download)

HP Manageability Integration Kit for Microsoft System Center Configuration Management Gen48

Ivanti Management Suite (download)9

HP Cloud Recovery<sup>10</sup>

HP Client Management Script Library (download)

### **Client Security Software**

HP Client Security Suite Gen6<sup>11</sup> HP Power On Authentication Windows Defender<sup>12</sup>

### **Security Management**

Trusted Platform Module TPM 2.0 Embedded Security Chip shipped with Windows 10. (Common Criteria EAL4+ Certified).

SATA 0,1 port disablement (via BIOS)

Serial, USB enable/disable (via BIOS)

Power-on password (via BIOS)

Setup password (via BIOS)

Support for chassis padlocks and cable lock devices

HP Sure Sense<sup>13</sup>

HP Sure Click<sup>14</sup>

HP Sure Start Gen615

HP Sure Run Gen3<sup>16</sup>

HP Sure Recover Gen3<sup>17</sup>

- 1. HP BIOSphere Gen6 is available on select HP Pro and Elite PCs. See product specifications for details. Features may vary depending on the platform and configurations.
- 2. Storage Drivelock does not work with Self Encrypting or Optane based storage.
- 3. HP Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane™.
- 4. Absolute agent is shipped turned off, and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a



### **Features**

limited warranty. Certain conditions apply. For full details visit: http://www.absolute.com/company/legal/agreements/computrace-agreement. Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software.

- 5. HP Support Assistant requires Windows and Internet access.
- 6. HP Smart Support is available to commercial customers through your HP Service Representative and HP Factory Configuration Services; or it can be downloaded at: http://www.hp.com/smart-support. HP Smart Support automatically collects the telemetry necessary upon initial boot of the product to deliver device-level configuration data and health insights.
- 7. HP Driver Packs not preinstalled, however available for download at http://www.hp.com/go/clientmanagement.
- 8. HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html.
- 9. Ivanti Management Suite subscription required.
- 10. HP Cloud Recovery is available for HP Elite and Pro desktops and laptops PCs with Intel® or AMD processors and requires an open, wired network connection. Note: You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Detail please refer to: https://support.hp.com/us-en/document/c05115630.
- 11. HP Client Security Manager Gen6 requires Windows and is available on select HP Pro and Elite PCs.
- 12. Windows Defender Opt in Windows 10 and internet connection required for updates.
- 13. HP Sure Sense requires Windows 10.
- 14. HP Sure Click is available on most HP PCs and supports Microsoft® Internet Explorer, Google Chrome, and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode, when Microsoft Office or Adobe Acrobat are installed.
- 15. HP Sure Start Gen6 is available on select HP PCs with Intel processors.
- 16. HP Sure Run Gen3 is available on select Windows 10 based HP Pro, Elite and Workstation PCs with select Intel® or AMD processors.
- 17. HP Sure Recover Gen3 is available on select HP PCs and requires an open network connection. Not available on platforms with multiple internal storage drives. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.



#### **ENVIRONMENTAL & INDUSTRY**

### **ENERGY STAR® certified models available**

ENERGY STAR® certified. EPEAT® 2019 registered where applicable. EPEAT® registration varies by country. See <a href="http://www.epeat.net">http://www.epeat.net</a> for registration status by country. According to IEEE 1680.1-2018.

Low halogen (chassis, all internal components and modules)<sup>1</sup> 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)<sup>1</sup>

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 Operating: 5000m

(unpressurized) Non-operating: 50000ft (15240 m)

1. 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.





### HP EliteDesk 800 Desktop Mini G6 series

HP EliteDesk 800 Desktop Eco-Label Certifications & declarations  System Configuration	This product has received or is in the labeled with one or more of the IT ECO declaration  US ENERGY STAR®  ENERGY STAR® certified. EPEAT® country. See http://www.epeat.ne 2018.  The configuration used for the Ene Desktop model is based on a "Typi	se marks:  2019 registered what for registration states ergy Consumption a	nere applicable. E atus by country. <i>A</i> nd Declared Noise	PEAT <sup>®</sup> registration varies by According to IEEE 1680.1-
Energy Consumption (in accordance with US ENERGY STAR® test method)	115VAC, 60Hz	230VAC,		100VAC, 50Hz
Normal Operation (Short idle)	8.9320 W	8.9410	) W	8.9190 W
Normal Operation (Long idle)	6.3380 W	6.3460	) W	6.3280 W
Sleep	1.0520 W	1.1020	) W	1.0320 W
Off	0.8210 W	0.8220	) W	0.8200 W
Heat Dissipation*	family. HP computers marked with the Environmental Protection Agency (EPA not offer ENERGY STAR® certified conf PC featuring a hard disk drive, a high e	A) ENERGY STAR® specifigurations, then energ	cifications for comp gy efficiency data li y, and a Microsoft V	uters. If a model family does sted is for a typically configured
Normal Operation (Short idle)	30.4581 BTU/hr	30.4888 E		30.4138 BTU/hr
Normal Operation (Long idle)	21.6126 BTU/hr	21.6399 E	BTU/hr	21.5785 BTU/hr
Sleep	3.5873 BTU/hr	3.7578 B	TU/hr	3.5191 BTU/hr
Off	2.7996 BTU/hr	2.8030 B	TU/hr	2.7962 BTU/hr
	<b>NOTE:</b> Heat dissipation is calculated be one hour.	ased on the measured	l watts, assuming t	he service level is attained for
Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)	Sound Power (L <sub>WAd</sub> , bels)			ound Pressure <sub>-pAm</sub> , decibels)
Typically Configured – Idle	2.8			18.8
Fixed Disk – Random writes	2.8			18.8
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			
Batteries	production.  This battery(s) in this product comply with EU Directive 2006/66/EC  Batteries used in the product do not contain:  Mercury greater the1ppm by weight Cadmium greater than 20ppm by weight			
	Battery size: CR2032 (coin cell) Battery type: Lithium			



	This washing in a continuous with the Destriction of Handdoor College and (De115) discussion			
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			
		oxic Enforcement Act of 1986).		
		AR® certified. EPEAT® 2019 registered where applicable. E		
	_	http://www.epeat.net for registration status by country. A	According to IEEE 1680.1-	
	2018.	rts weighing over 25 grams used in the product are marked	d por ISO11469 and ISO1043	
		ct contains a minimum of 35% post-consumer recycled pla		
		post-consumer recycled plastic*	istic (by Wei), including 1070	
		ct is 95.1% recycle-able when properly disposed of at end	of life.	
	*NOTE: Recyc	led plastic content percentage is based on the definition set in the	e IEEE 1680.1-2018 standard.	
Packaging Materials	External:	PAPER/Corrugated	562 g	
		PAPER/Molded pulp	74 g	
	Internal:	PLASTIC/Polyethylene low density	16 g	
Material Usage		does not contain any of the following substances in exces	s of regulatory limits (refer	
		neral Specification for the Environment at	10)	
	• Asbestos	hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pd	IT):	
		Colorants		
	Certain Azo Colorants     Certain Brominated Flame Retardants – may not be used as flame retardants in plastics			
	Cadmium			
	Caumum     Chlorinated Hydrocarbons			
	Chlorinated Hydrocarbons     Chlorinated Paraffins			
	• Formaldehyde			
	Halogenated Diphenyl Methanes			
		nates and sulfates		
	• Lead and Le	ead compounds		
	Mercuric 0	kide Batteries		
		ishes must not be used on the external surface designed to	o be frequently handled or	
	carried by th			
		leting Substances		
		nated Biphenyls (PBBs)		
		nated Biphenyl Ethers (PBBEs)		
		nated Biphenyl Oxides (PBBOs)		
		nated Biphenyl (PCB)		
		ated Terphenyls (PCT) hloride (PVC) – except for wires and cables, and certain ret	ail packaging has been	
		ntoride (PVC) – except for wires and cables, and certain ret emoved from most applications.	ait packaying nas been	
		Substances		
	• Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)			

### **Features**

### **Packaging 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)

### 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://www.hp.com/hpinfo/globalcitizenship/environment/pdf/PC\_GBU\_Product\_Design\_ISO\_14K \_Certificate.pdf

and

http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf





### **HP EliteDesk 800 Small Form Factor G6 series**

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®  • ENERGY STAR® certified. EPEAT® 2019 registered where applicable. EPEAT® registration varies by country. See <a href="http://www.epeat.net">http://www.epeat.net</a> for registration status by country. According to IEEE 1680.1-2018.				
System Configuration	The configuration used for the Ener Desktop model is based on a "Typic			e Emissions data for the	
Energy Consumption (in accordance with US ENERGY STAR® test method)	115VAC, 60Hz 230VAC, 50Hz 100VAC, 50Hz				
Normal Operation (Short idle)	12.479 watt	12.579	watt	12.291 watt	
Normal Operation (Long idle)	11.193 watt	11.306	watt	11.151 watt	
Sleep	0.675 watt	0.7		0.665 watt	
Off	0.479 watt	0.5		0.475 watt	
Heat Dissipation*	Environmental Protection Agency (EPA not offer ENERGY STAR® compliant con configured PC featuring a hard disk driv system.  115VAC, 60Hz	figurations, then ene	ergy efficiency data ower supply, and a	a listed is for a typically	
Normal Operation (Short			_		
idle)	42.55339 BTU/hr	42.89439	BTU/nr	41.91231 BTU/hr	
Normal Operation (Long idle)	38.16813 BTU/hr	38.55346 BTU/hr		38.02491 BTU/hr	
Sleep	2.30175 BTU/hr	2.40064 E	BTU/hr	2.26765 BTU/hr	
Off	1.63339 BTU/hr	1.70841 E	BTU/hr	1.61975 BTU/hr	
	<b>NOTE:</b> Heat dissipation is calculated ba one hour.	sed on the measured	l watts, assuming t	the service level is attained for	
Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)	Sound Power Sound Pressure (L <sub>pAm</sub> , decibels)				
Typically Configured – Idle	3.11			20.7	
Fixed Disk–Random writes	3.41			22.1	
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.				
Batteries	This battery(s) in this product comply with EU Directive 2006/66/EC  Batteries used in the product do not contain: Mercury greater the1ppm by weight Cadmium greater than 20ppm by weight				
	Battery size: CR2032 (coin cell)				





	Battery type:	: Lithium		
Additional Information				
Additional Information	<ul> <li>This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC.</li> <li>This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive - 2002/96/EC.</li> </ul>			
		ct is in compliance with California Proposition 65 (State of	California; Safe Drinking	
		oxic Enforcement Act of 1986).		
		AR® certified. EPEAT® 2019 registered where applicable. E		
	country. See www.epeat.net for registration status by country. According to IEEE 1680.1-2018.  • Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043.  • This product contains a minimum of 35% post-consumer recycled plastic (by wt.); Including 10% ITE-derived post-consumer recycled plastic*  • This product is 95.1% recycle-able when properly disposed of at end of life.			
	*NOTE: Recycl	led plastic content percentage is based on the definition set in th	e IEEE 1680.1-2018 standard.	
Packaging Materials	External:	PAPER/Corrugated	1158 g	
	Internal:	PAPER/Molded pulp	340 g	
		PLASTIC/Polyethylene low density	28 g	
Material Usage	to the HP Ger	does not contain any of the following substances in exces neral Specification for the Environment at	-	
	http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf):			
	• Asbestos	Coloranto		
	<ul> <li>Certain Azo Colorants</li> <li>Certain Brominated Flame Retardants – may not be used as flame retardants in plastics</li> </ul>			
	Certain Brominated Frame Retainants – may not be used as frame retainants in prastics     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.			
		leting Substances		
	Polybrominated Biphenyls (PBBs)			
	Polybrominated Biphenyl Ethers (PBBEs)			
	Polybrominated Biphenyl Oxides (PBBOs)     Polybloginated Biphenyl (PCB)			
	Polychlorinated Biphenyl (PCB)     Polychlorinated Toyshopyla (PCT)			
	Polychlorinated Terphenyls (PCT)     Polyminal Chlorida (PVC)			
	Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.			
	voluntarily removed from most applications. • Radioactive Substances			
	Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)			
Packaging Usage			woduct packaging.	
. actualing Dauge	HP follows these guidelines to decrease the environmental impact of product packaging:			
	Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.			
	• Eliminate the use of ozone-depleting substances (ODS) in packaging materials.			
	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.			
	. tastic paci			

### **Features**

### 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://www.hp.com/hpinfo/globalcitizenship/environment/pdf/PC\_GBU\_Product\_Design\_ISO\_14K \_Certificate.pdf

and

http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf

### **HP EliteDesk 800 Tower G6 series**

### 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®
- ENERGY STAR® certified. EPEAT® 2019 registered where applicable. EPEAT® registration varies by country. See <a href="http://www.epeat.net">http://www.epeat.net</a> for registration status by country. According to IEEE 1680.1-2018.

### **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, 60Hz	
Normal Operation (Short idle)	11.67 W	11.24 W	11.53 W	
Normal Operation (Long idle)	9.83 W	10.55 W	9.69 W	
Sleep	0.84 W	0.81 W	0.86 W	
Off	0.57 W	0.53 W	0.57 W	

**NOTE:** Energy efficiency data listed is for an ENERGY STAR® compliant 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® compliant 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.

Heat Dissipation*	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation (Short idle)	39.91 BTU/hr	38.44 BTU/hr	39.43 BTU/hr
Normal Operation (Long idle)	33.62 BTU/hr	36.08 BTU/hr	33.14 BTU/hr
Sleep	2.87 BTU/hr	2.77 BTU/hr	2.94 BTU/hr
Off	1.95 BTU/hr	1.81 BTU/hr	1.95 BTU/hr



	NOTE: Heat di one hour.	ssipation is calculated based on the	e measured watts, assuming tl	ne service level is attained for
Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)		Sound Power (L <sub>WAd</sub> , bels)		ound Pressure <sub>pAm</sub> , decibels)
Typically Configured – Idle		3.3		21
Fixed Disk–Random writes		3.3		22
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			
Batteries	production.  This battery(s) in this product comply with EU Directive 2006/66/EC  Batteries used in the product do not contain: Mercury greater the1ppm by weight Cadmium greater than 20ppm by weight  Battery size: CR2032 (coin cell)			
Additional Information	<ul> <li>This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC.</li> <li>This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive – 2002/96/EC.</li> <li>This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).</li> <li>ENERGY STAR® certified. EPEAT® 2019 registered where applicable. EPEAT® registration varies by country. See www.epeat.net for registration status by country. According to IEEE 1680.1-2018.</li> <li>Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043.</li> <li>This product contains a minimum of 35% post-consumer recycled plastic (by wt.); Including 10% ITE-derived post-consumer recycled plastic*</li> <li>This product is 95.1% recycle-able when properly disposed of at end of life.</li> </ul> *NOTE: Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 standard.			
Packaging Materials	External:	PAPER/Corrugated		1114 g
		PAPER/Molded Pulp		788 g
	Internal:	•	oncity - I DDE	44 g
Material Usage	Internal: PLASTIC/Polyethylene low density - LDPE 44 g  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:
	• Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.
	• Eliminate the use of ozone-depleting substances (ODS) in packaging materials.
	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://www.hp.com/hpinfo/globalcitizenship/environment/pdf/PC_GBU_Product_Design_ISO_14KCertificate.pdf
	and
	http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf

HP EliteUne 800 G6 23.8-II	n All-In-Une			
Eco-Label Certifications &	This product has received or is in the process of being certified to the following approvals and may			
declarations	be labeled with one or more of these marks:			
	IT ECO declaration			
	US ENERGY STAR®			
	US Federal Energy Management Program (FEMP)			
	• EPEAT <sup>®</sup> Gold: Bronze, Silver, Gold registered in the United States. See http://www.epeat.net			
	for registration status in your country.			
	TCO Certified Edge			
	China Energy Conservation Program (CECP)			
	China State Environmental Protection Administration (SEPA)			
	Taiwan Green Mark			
	Korea Eco-label			
	Japan PC Green label*			



System Configuration	The configuration used for the Energy Consumption and Declared Noise Emissions data for the All-in-One PC model is based on a typically configured PC featuring a hard disk drive, a high efficiency power supply, and a Microsoft Windows® operating system.				
Energy Consumption (in accordance with US ENERGY STAR® test method)	115VAC, 60Hz 230VA			100VAC, 50Hz	
Normal Operation (Short idle)	15.60 W	15.68	3 W	15.45 W	
Normal Operation (Long idle)	5.57 W	5.65	W	5.41 W	
Sleep	0.94 W	1.00	W	0.82 W	
Off	0.84 W	0.87	W	0.81 W	
	NOTE: Energy efficiency data listed is for a family. HP computers marked with the ENI Environmental Protection Agency (EPA) EN not offer ENERGY STAR® compliant configured PC featuring a hard disk drive, system.	ERGY STAR® Logc NERGY STAR® spe urations, then en a high efficiency	o are compliant with cifications for comp ergy efficiency data power supply, and a	the applicable U.S. uters. If a model family does listed is for a typically Microsoft Windows® operating	
Heat Dissipation*	115VAC, 60Hz	230VAC,	50Hz	100VAC, 50Hz	
Normal Operation (Short idle)	53.2028BTU/hr	53.4772	BTU/hr	52.691 BTU/hr	
Normal Operation (Long idle)	19.02 BTU/hr	19.3 BTU/hr		18.5 BTU/hr	
Sleep	3.2 BTU/hr	3.4 BT		2.8 BTU/hr	
Off	2.9 BTU/hr	3 BTU	/hr	2.8 BTU/hr	
	<b>NOTE:</b> Heat dissipation is calculated based one hour.	d on the measure	d watts, assuming tl	ne service level is attained for	
Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)	Sound Power (L <sub>WAd</sub> , bels)			ound Pressure <sub>.pAm</sub> , decibels)	
Typically Configured — Idle	2.5			14	
Fixed Disk – Random writes	2.5			15	
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:  • 6 USB ports • 2 memory slots • 1 Mini PCIe half-length slot • 1 MXM 3.0 Type A - 35W slot • 1 mSATA slot • 1 2.5" internal bay supporting up to Two 2.5" hard drives (HDD/SSD/SED/SSHD) • 1 5.25" external supporting optical drive  Spare parts are available throughout the warranty period and or for up to "5" years after the end of production.				
Batteries	This battery(s) in this product comply  Batteries used in the product do not comply  Mercury greater the1ppm by weight  Cadmium greater than 20ppm by weight	ontain:	ve 2006/66/EC		
	Battery size: CR2032 (coin cell) Battery type: Lithium				



Additional Information	<ul> <li>This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC.</li> <li>This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive - 2002/96/EC.</li> <li>This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).</li> </ul>			
		roduct is in compliance with the IEEE 1680 (EPEAT) epeat.net	standard at the gold level, see	
	<ul> <li>Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043.</li> </ul>			
		roduct contains 51.7% post-consumer recycled pla 1-2018 standard, criterion 4.2.1.1.	stic (by wt.) according to IEEE	
	This p	roduct is 97.8% recycle-able when properly dispos	ed of at end of life.	
Packaging Materials	External:	PAPER/Corrugated	1.488 g	
	Internal:	PLASTIC/Polyethylene Expanded - EPE	1.052 g	
	The plastic p	ackaging material contains at least 90% recycled o	content.	
		ed paper packaging materials contains at least 80		
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 c	opy of the HP RoHS Compliance Statement, see HI	P RoHS position statement.	
Material Usage	to the HP Ge	does not contain any of the following substances in neral Specification for the Environment at		
	http://www. • Asbestos	hp.com/hpinfo/globalcitizenship/environment/pdf	f/gse.pdf):	
		Colorants minated Flame Retardants – may not be used as fl	ame retardants in plastics	
	<ul> <li>Cadmium</li> <li>Chlorinated Hydrocarbons</li> <li>Chlorinated Paraffins</li> <li>Formaldehyde</li> </ul>			
	<ul><li>Halogenated Diphenyl Methanes</li><li>Lead carbonates and sulfates</li></ul>			
		ead compounds kide Batteries		
	• Nickel – finishes must not be used on the external surface designed to be frequently har carried by the user.			
	• Ozone Dep	leting Substances nated Biphenyls (PBBs)		
		nated Biphenyl Ethers (PBBEs)		
	Polybrominated Biphenyl Oxides (PBBOs)			
	Polychlorin	ated Biphenyl (PCB)		

## Features

	<ul> <li>Polychlorinated Terphenyls (PCT)</li> <li>Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.</li> <li>Radioactive Substances</li> <li>Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)</li> </ul>
Packaging Usage	HP follows these guidelines to decrease the environmental impact of product packaging:  • Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.  • Eliminate the use of ozone-depleting substances (ODS) in packaging materials.  • 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 0EM 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://www.hp.com/hpinfo/globalcitizenship/environment/pdf/PC_GBU_Product_Design_ISO_14K _Certificate.pdf and http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf

### HP EliteOne 800 G6 27 All-in-One PC

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 <sup>D</sup> Gold: Bronze, Silver, Gold registered in the United States. See http://www.epeat.net for registration status in your country.  • TCO Certified Edge  • China Energy Conservation Program (CECP)  • China State Environmental Protection Administration (SEPA)  • Taiwan Green Mark  • Korea Eco-label  • Japan PC Green label*
System Configuration	The configuration used for the Energy Consumption and Declared Noise Emissions data for the All- in-One PC model is based on a typically configured PC featuring a hard disk drive, a high efficiency power supply, and a Microsoft Windows® operating system.





## Features

Energy Consumption (in accordance with US ENERGY STAR® test method)	115VAC, 60Hz	230VAC,	50Hz	100VAC, 60Hz
Normal Operation (Short idle)	22.57 W 22.65 W		W	22.42 W
Normal Operation (Long idle)	6.35 W	6.44		6.19 W
Sleep	1.47 W	1.52	W	1.35 W
Off	0.88 W	0.89	W	0.84 W
	Note: Energy efficiency data listed family. HP computers marked with Environmental Protection Agency not offer ENERGY STAR® complian configured PC featuring a hard dis system.	n the ENERGY STAR® I (EPA) ENERGY STAR® t configurations, thei	Logo are compliant specifications for n energy efficiency	with the applicable U.S. computers. If a model family does
Heat Dissipation*	115VAC, 60Hz	230VAC,	50Hz	100VAC, 60Hz
Normal Operation (Short idle)	76.967 BTU/hr	77.2467 B		76.4556 BTU/hr
Normal Operation (Long idle)	21.7 BTU/hr	22 BTU	/hr	21.2 BTU/hr
Sleep	5 BTU/hr	5.2 BTU	J/hr	4.6 BTU/hr
Off	3 BTU/hr	3 BTU/	/hr	2.9 BTU/hr
Declared Noise Emissions (in accordance with	NOTE: Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.  Sound Power (L <sub>WAd</sub> , bels) Sound Pressure (L <sub>pAm</sub> , decibels)		Sound Pressure	
ISO 7779 and ISO 9296) Typically Configured – Idle	2.5			15
Fixed Disk – Random writes	2.5			15 16
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:  • 6 USB ports • 2 memory slots • 1 Mini PCIe half-length slot • 1 MXM 3.0 Type A - 35W slot • 1 mSATA slot • 1 2.5" internal bay supporting up to Two 2.5" hard drives (HDD/SSD/SED/SSHD) • 1 5.25" external supporting optical drive  Spare parts are available throughout the warranty period and or for up to "5" years after the end of production.			
Batteries	This battery(s) in this product of Batteries used in the product of Mercury greater the1ppm by word Cadmium greater than 20ppm  Battery size: CR2032 (coin cell) Battery type: Lithium	o not contain: reight by weight	ective 2006/66/E	C



## Features

Additional Information	• This	product is in compliance with the Restrictions of Haz	ardous Substances (RoHS)
Additional miormation		ctive - 2011/65/EC.	ai dods Substances (Nons)
		HP product is designed to comply with the Waste Ele EE) Directive – 2002/96/EC.	ctrical and Electronic Equipment
	• This	product is in compliance with California Proposition 6	55 (State of California; Safe
		king Water and Toxic Enforcement Act of 1986).	
		product is in compliance with the IEEE 1680 (EPEAT) v.epeat.net	standard at the gold level, see
	<ul> <li>Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043.</li> </ul>		
		product contains 72.2% post-consumer recycled pla	stic (by wt.) according to IEEE
		0.1-2018 standard, criterion 4.2.1.1. product is 98% recycle-able when properly disposed	of at and of life
	• This	product is 36% recycle-able when property disposed	of at end of the.
Packaging Materials	External:	PAPER/Corrugated	1.510 g
	Internal:	PLASTIC/Polyethylene Expanded - EPE	1.520 g
		packaging material contains at least xx% recycled cor	
		ted paper packaging materials contains at least xx%	-
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.		
		opy of the HP RoHS Compliance Statement, see: HP R	-
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 <a href="http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen_specifications.html">http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen_specifications.html</a> ):		
		estos	
		ain Azo Colorants	
		ain Brominated Flame Retardants – may not be used mium	as flame retardants in plastics
		rinatri rinated Hydrocarbons	
		orinated Paraffins	
		2-Ethylhexyl) phthalate (DEHP)	
		zyl butyl phthalate (BBP)	
		ityl phthalate (DBP)	
		obutyl phthalate (DIBP)	
		naldehyde	
		ogenated Diphenyl Methanes	
		d carbonates and sulfates	
		d and Lead compounds curic Oxide Batteries	
	ı en	Lunc Oniue Datteries	



## Features

_	·
	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)
	<ul> <li>Polychlorinated Terphenyls (PCT)</li> </ul>
	<ul> <li>Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has</li> </ul>
	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:
	<ul> <li>Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.</li> </ul>
	<ul> <li>Eliminate the use of ozone-depleting substances (ODS) in packaging materials.</li> </ul>
	Design packaging materials for ease of disassembly.
	Maximize the use of post-consumer recycled content materials in packaging materials.
	<ul> <li>Use readily recyclable packaging materials such as paper and corrugated materials.</li> </ul>
	Reduce size and weight of packages to improve transportation fuel efficiency.
	<ul> <li>Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.</li> </ul>
End-of-life Management	HP Inc. offers end-of-life HP product return and recycling programs in many geographic areas. To
and Recycling	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.
HP, Inc. Corporate	For more information about HP's commitment to the environment:
Environmental	Child City and the Property
Information	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** 

#### **SERVICE AND SUPPORT**

#### **HP EliteDesk 800 G6 Tower Business PC**

On-site Warranty<sup>15</sup>: Three-year (3-3-3) limited warranty delivers three years of on-site, next business day<sup>16</sup> service for parts and labor and includes free support 24 x 7<sup>17</sup>. Three-year onsite and labor are not available in all countries. 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.<sup>18</sup>

- 15. Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.
- 16. 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.

  17. Technical telephone support applies only to HP-configured and third-party HP qualified hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries.
- 18. 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.

### **HP EliteDesk 800 G6 Small Form Factor Business PC**

On-site Warranty<sup>15</sup>: Three-year (3-3-3) limited warranty delivers three years of on-site, next business day<sup>16</sup> service for parts and labor and includes free support 24 x 7<sup>17</sup>. Three-year onsite and labor are not available in all countries. 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/qo/cpc.<sup>18</sup>

- 15. Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.
- 16. 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.

  17. Technical telephone support applies only to HP-configured and third-party HP qualified hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries.
- 18. 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.

### HP EliteDesk 800 G6 Desktop Mini Business PC

On-site Warranty<sup>15</sup>: Three-year (3-3-3) limited warranty delivers three years of on-site, next business day<sup>16</sup> service for parts and labor and includes free support 24 x 7<sup>17</sup>. Three-year onsite and labor are not available in all countries. 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.<sup>18</sup>

- 15. Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.
- 16. 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.

  17. Technical telephone support applies only to HP-configured and third-party HP qualified hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries.
- 18. 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.



### **Features**

#### HP EliteOne 800 G6 24 & 27 All-in-One Business PC

On-site Warranty<sup>15</sup>: Three-year (3-3-3) limited warranty delivers three years of on-site, next business day<sup>16</sup> service for parts and labor and includes free support 24 x 7<sup>17</sup>. Three-year onsite and labor are not available in all countries. 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.<sup>18</sup>

- 15. Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.
- 16. 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.

  17. Technical telephone support applies only to HP-configured and third-party HP qualified hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries.
- 18. 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® 2019 registered where applicable. EPEAT® registration varies by country. See <a href="http://www.epeat.net">http://www.epeat.net</a> for registration status by country. According to IEEE 1680.1-2018.



Technical Specifications – Processors

#### **PROCESSORS**

#### Intel® 10th Generation Core™ Processors

All HP EliteDesk 800 G6 Business PC models featuring this technology include processors that are part of the Intel® Stable Image Platform Program (SIPP) designed to ensure the stability promise inherent in the value proposition of the HP EliteDesk and EliteOne 800 G6 Business PC.

Intel® Advanced Management Technology (AMT) v12 – An advanced set of remote management features and functionality which provides network administrators the latest and most effective tools to remotely discover, heal, and protect networked client systems regardless of the system's health or power state. AMT 12 includes the following advanced management functions:

- Support for configuration of Intel AMT 12.0 new capabilities
- No reset after provisioning
- Support changes to BIOS table 130
- Support for Microsoft Windows Server 2012 R2
- Support for New Microsoft SQL Server Versions including Standard and Enterprise editions
- Support for Intel SSD Prop 2500 Series
- Support for Intel Enterprise Digital Fence
- The Platform Discovery Utility can now discover these additional Intel products:
- Intel SSD Pro 2500 Series; Enterprise Digital Fence
- Intel Identity Protection Technology with One Time Password; Public Key Infrastructure; Multi Factor Authentication
- Intel Identity Protection Technology with Intel WiGig
- New Profile Editor and Profile Editor Plugin Interface
- New Required Permissions for Solutions Framework

Technical Specifications – Display Panel Specifications

#### **DISPLAY PANEL SPECIFICATIONS**

## 23.8" diagonal IPS widescreen WLED backlit anti-glare LCD (1920 x 1080) non-touch or optional Projected Capacitive Touch supports up to 10 touch-points

Non-Touch Support HW low blue light feature

Type IPS WLED Backlit LCD
Active area (mm) 527.04 x 296.46
Native Resolution (HxV) 1920 x 1080

**Refresh Rate** 60 Hz @ 1920 x 1080

Aspect ratio 16:9

**Pixel pitch (HxV)(mm)** 0.2745 x 0.2745

Contrast ratio 1000:1

Brightness\* 250nits

Viewing angle (HxV) 178 ° x 178 °

Backlight lamp life (to half brightness) 30,000 hours minimum

**Color support** Up to 16.7 million colors with the use of FRC technology

Color gamutNTSC 72%Anti-glareYes\*Response Time14ms

**Default color temperature** Warm (6500K)

NOTE\*: Actual brightness will be lower with touchscreen or HP Sure View

### 23.8" diagonal IPS widescreen WLED backlit anti-glare LCD (1920 x 1080) with HP Sure View (optional)

Type IPS WLED Backlit LCD
Active area (mm) 527.04 x 296.46
Native Resolution (HxV) 1920 x 1080

**Refresh Rate** 60 Hz @ 1920 x 1080

Aspect ratio 16:9

**Pixel pitch (HxV)(mm)** 0.2745 x 0.2745

Contrast ratio 1000:1

**Brightness\*** 285 nits (non-Privacy); 400 nits (Privacy) **Viewing angle (HxV)** 178° x 178° (non-Privacy); 80° x 178° (Privacy)

Backlight lamp life (to half brightness) 30,000 hours minimum

**Color support** Up to 16.7 million colors with the use of FRC technology

Color gamutNTSC 72%Anti-glareYes\*Response Time14ms

**Default color temperature** Warm (6500K)

NOTE\*: Actual brightness will be lower with touchscreen or HP Sure View



Technical Specifications – Display Panel Specifications

### 27.0" diagonal IPS widescreen WLED backlit anti-glare LCD (1920 x 1080) non-touch

Support HW low blue light feature

Type IPS WLED Backlit LCD
Active area (mm) 597.888 x 336.312
Native Resolution (HxV) 1920 x 1080

**Refresh Rate** 60 Hz @ 1920 x 1080

Aspect ratio 16:9

**Pixel pitch (HxV)(mm)** 0.3114 x 0.3114

Contrast ratio1000:1Brightness250nitsViewing angle (HxV)178° x 178°

Backlight lamp life (to half brightness) 30,000 hours minimum

**Color support** Up to 16.7 million colors with the use of FRC technology

Color gamutNTSC 72%Anti-glareYes\*Response Time14ms

**Default color temperature** Warm (6500K)

### 27.0" diagonal IPS widescreen WLED backlit LCD (2560 x 1440) Touch

Support HW low blue light feature

 Type
 IPS WLED Backlit LCD

 Active area (mm)
 596.736 x 335.664

 Native Resolution (HxV)
 2560 x 1440

**Refresh Rate** 60 Hz @ 2560 x 1440

Aspect ratio 16:9

**Pixel pitch (HxV)(mm)** 0.2331 x 0.2331

Contrast ratio 1000:1

Brightness\* 250nits

Viewing angle (HxV) 178° x 178°

**Backlight lamp life (to half brightness)** 30,000 hours minimum **Color support** Up to 16.7 million colors

Color gamutNTSC 72%Anti-glareNo\*Response Time14ms

**Default color temperature** Warm (6500K)

2. For All in One only Intel® HD Graphics (integrated)

NOTE\*: Actual brightness will be lower with touchscreen or HP Sure View



<sup>1.</sup> All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

Technical Specifications – Display Panel Specifications

Adjustable Height Stand:	Height - Vertical/Landscape Adjustment	130mm (±2 mm)
	Portrait Adjustment	No portrait
	Tilt Angle	-5° to +18° (±2°) in landscape and portrait
	Rotation (Swivel)	90° (±1°) (45 left, 45 right)
	Pivot	No pivot
Recline Stand:	Height - Vertical Adjustment	No height
	Tilt Angle	+36.5° to +58° (+/-1.5°)
	Rotation (swivel)	No swivel



## Technical Specifications – Graphics

#### **GRAPHICS**

### HP EliteDesk 800 G6 Desktop Mini Business PC

Intel® HD Graphics (integrated)

VGA Controller Integrated

Multimode capable; supports HDCP, Display Port Audio (2 streams), HBR2 link rates and Multi-

DisplayPort™ Stream Technology for a maximum of 3 displays connected to any output controlled by Intel®

Graphics

Supports HDMI 2.0a features

**HDMI (optional)** Supports HDCP 2.3

Supports audio over HDMI

VGA (optional) VGA output

**USB-C® DP Alt Mode (optional)** DisplayPort over the optional USB-C® module

The actual amount of maximum graphics memory can be >4GB. System memory is allocated

**Memory** for graphics as needed using Intel's Dynamic Video Memory Technology (DVMT), to provide an

optimal balance between graphics and system memory use.

Maximum Color Depth up to 10 bits/color

HEVC 10b Enc/Dec HW

VP9 10b Dec HW

Graphics/Video API Support HDR

Rec. 2020

DX12

 Max. Resolution (VGA)
 2048 x 1536@60Hz

 Max. Resolution (HDMI)
 4096 x 2160@60Hz

 Max. Resolution (DP)
 4096 x 2160@60Hz

### Nvidia® GeFORCE® GTX1660 Ti

Architecture Discrete GPU

Nvidia® GPU drives the integrated panel and all of the graphics output ports

**DisplayPort** Maximun pixel clock :1.3 GHz pixels per second

Maximun bandwidth: 25.92 Gbps per connector (FEC Disable)

**HDMI** Supports HDMI 2.0 features

Supports HDCP 2.2, HDR

Memory 6GByte, 192bit wide GDDR6

Maximum Color Depth up to 12 bits/color

Graphics/Video API Support DirectX 12

OpenGL 4.6

**Display Port** Support DP1.4(DSC1.2a)

Maximum pixel clock: 1.3 GHz pixels per second

Maximum bandwidth: 25.92 Gbps per connector (FEC Disable)

**Max. Resolution (HDMI)** 4096 x 2160@60Hz

Max. Resolution (DP) 5120 x 3200@60Hz Example of maximum resolutions with CVT-RB timings

**Port Availability** (3) Mini DP 1.4 ports and (1) Micro HDMI 2.0 port



## Technical Specifications – Graphics

#### **HP EliteDesk 800 G6 Tower Business PC**

Intel® UHD Graphics (integrated)

Memory

**VGA Controller** Integrated

Multimode capable; supports HDCP, Display Port Audio (2 streams), HBR2 link rates and Multi-DisplayPort™ 1.4

Stream Technology for a maximum of 3 displays connected to any output controlled by Intel®

Supports HDMI 2.0a features

**HDMI** (optional) Supports HDCP 2.2

Supports BT2020 and HDR playback (7th Gen processors only)

VGA (optional) VGA ouput

**USB-C® DP Alt Mode (optional)** DisplayPort over the optional USB-C® module

The actual amount of maximum graphics memory can be >4GB. System memory is allocated

for graphics as needed using Intel's Dynamic Video Memory Technology (DVMT), to provide an

optimal balance between graphics and system memory use.

**Maximum Color Depth** up to 10 bits/color

**HEVC 10b Enc/Dec HW** 

VP9 10b Dec HW

**Graphics/Video API Support** HDR

Rec. 2020 DX12

640x480 60 Hz640x480 67Hz

640x480 72Hz 640x480 75Hz 720x400 70Hz 800x600 60Hz 800x600 75Hz 1024x768 60Hz 1024x768 75Hz

34" UHD Supported **Resolutions and Refresh** Rates. Other resolutions may also work.

1280x960 60Hz 1280x720 60Hz 1280x1024 60Hz 1280x1024 75Hz

1440x900 60Hz 1440x900 75Hz 1680x1050 60Hz 1920x1080 60Hz

3440x1440 60Hz (Native Resolution)

3440x1440 30Hz

Max. Resolution (VGA) 2048 x 1536@60Hz Max. Resolution (HDMI) 4096 x 2160@60Hz Max. Resolution (DP) 4096 x 2160@60Hz

### NVIDIA® GeForce® RTX 2060 Super 8GB Graphics Card

**Engine Clock** 1650 MHz **Memory Clock** 7000 MHz Memory Size(width) 8 GB(256-bit) 256M x 32 GDDR6 **Memory Type** Max. Resolution(DVI) 2560x1600@60Hz Max. Resolution(HDMI) 4096x2160@60Hz Max. Resolution(DP) 7680x4320@60Hz

**Multi Display Support** 3 displays **HDCP Compliance** Yes



### Technical Specifications – Graphics

Rear I/O connectors(bracket) DVI+HDMI+DP

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <175W

**PCB form-factor with bracket** ATX (Full height) PCB with ATX dual slot bracket

### AMD® Radeon™ RX 550X 4 GB FH PCIe x16

Engine Clock1183MHzMemory Clock6 GbpsMemory Size(width)4 GB(128-bit)Memory TypeGDDR5

 Max. Resolution(HDMI)
 4096x2160 @ 60Hz

 Max. Resolution(DP)
 5120x2880 @ 60Hz

Multi Display Support 2 displays

**HDCP Compliance** Yes

Rear I/O connectors(bracket) HDMI, DPx2

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

**Total power consumption(W)** <50W

PCB form-factor with bracket LP (low profile) PCB with FH/LP bracket

### AMD® Radeon™ RX 580 8GB GDDR5 Graphics Card

 Engine Clock
 1266 MHz

 Memory Clock
 4000 MHz

 Memory Size(width)
 8 GB (256-bit)

 Memory Type
 256M x 32 GDDR5

 Max. Resolution(HDMI)
 4096x2160@60Hz

 Max. Resolution(DP)
 5120x3200@60Hz

Multi Display Support 4 displays

**HDCP Compliance** Yes

Rear I/O connectors(bracket) HDMI + DPx3

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <150W

**PCB form-factor with bracket** ATX (Full height) PCB with ATX dual slot bracket

## NVIDIA® GeForce® RTX 2080 Super 8GB GDDR6

 Engine Clock
 1815 MHz

 Memory Clock
 7750 MHz

 Memory Size(width)
 8GB (256-bit)

 Memory Type
 256M x 32 GDDR6

 Max. Resolution(Virtual Link)
 3840 x 2160@60Hz

 Max. Resolution(HDMI)
 4096 x 2160@60Hz

 Max. Resolution(DP)
 7680 x 4320@60Hz

Multi Display Support 4 displays
HDCP Compliance Yes

Rear I/O connectors(bracket) DPx3 + HDMI + Virtual Link



## Technical Specifications – Graphics

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <285W

**PCB form-factor with bracket** ATX (Full height) PCB with ATX dual slot bracket

### NVIDIA® GeForce® RTX 2070 Super 8GB GDDR6

 Engine Clock
 1620 MHz

 Memory Clock
 7000 MHz

 Memory Size(width)
 8GB (256-bit)

 Memory Type
 256M x 32 GDDR6

 Max. Resolution(Virtual Link)
 3840 x 2160@60Hz

 Max. Resolution(HDMI)
 4096 x 2160@60Hz

 Max. Resolution(DP)
 7680 x 4320@60Hz

**HDCP Compliance** Yes

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <210W

**PCB form-factor with bracket** ATX (Full height) PCB with ATX dual slot bracket

### NVIDIA® Quadro P620 2GB Graphics Card

Engine Clock1354 MHzMemory Clock2500 MHzMemory Size(width)2GB (128-bit)Memory Type128M x 32 GDDR5Max. Resolution(DP)5120x2880@60Hz

Multi Display Support 4 displays
HDCP Compliance Yes
Rear I/O connectors(bracket) mDPx4

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <40W

**PCB form-factor with bracket** LP PCB with LP bracket

### **NVIDIA® Quadro P400 2GB Graphics Card**

Engine Clock1252 MHzMemory Clock2000 MHzMemory Size(width)2GB (64-bit)Memory Type256M x 32 GDDR5Max. Resolution(DP)5120x2880@60Hz

Multi Display Support3 displaysHDCP ComplianceYesRear I/O connectors(bracket)mDPx3

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <30W

PCB form-factor with bracket LP PCB with LP bracket



### Technical Specifications – Graphics

### AMD® Radeon™ R7 430 2GB VGA+DP 64bit Graphics Card

Engine Clock780 MHzMemory Clock1100 MHzMemory Size(width)2 GB(64-bit)Memory Type256M x 32 GDDR5Max. Resolution(HDMI)2048x1536

Max. Resolution(DP) 4096x2160@60Hz

Multi Display Support 2 displays
HDCP Compliance Yes
Rear I/O connectors(bracket) VGA+DP

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <50W

PCB form-factor with bracket LP PCB with FH/LP bracket

### AMD® Radeon™ R7 430 2GB GDDR5 2DP 64 bit Graphics Card

Engine Clock780 MHzMemory Clock1100 MHzMemory Size(width)2 GB(64-bit)Memory Type256M x 32 GDDR5Max. Resolution(DP)4096x2160@60Hz

Multi Display Support2 displaysHDCP ComplianceyesRear I/O connectors(bracket)DPx2

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <50W

PCB form-factor with bracket LP PCB with FH/LP bracket

#### **HP EliteDesk 800 G6 Small Form Factor Business PC**

Intel® HD Graphics (integrated)

VGA Controller Integrated

DisplayPort™ 1.4 Multimode capable; supports HDCP, Display Port Audio (2 streams), HBR2 link rates and

Multi-Stream Technology for a maximum of 3 displays connected to any output controlled by

Intel® Graphics

**HDMI (optional)** Supports HDMI 2.0a features

Supports HDCP 2.2 Supports audio over HDMI

VGA (optional) VGA Output

**USB-C**<sup>®</sup> **DP Alt Mode (optional)** DisplayPort over the optional USB-C<sup>®</sup> module

Memory The actual amount of maximum graphics memory can be >4GB. System memory is allocated

for graphics as needed using Intel's Dynamic Video Memory Technology (DVMT), to provide

an optimal balance between graphics and system memory use.

Maximum Color Depth up to 10 bits/color
Graphics/Video API Support HEVC 10b Enc/Dec HW

VP9 10b Dec HW

HDR Rec. 2020 DX12

 Max. Resolution (VGA)
 2048 x 1536@60Hz

 Max. Resolution (HDMI)
 4096 x 2160@60Hz



## Technical Specifications – Graphics

Max. Resolution (DP) 4096 x 2160@60Hz

### AMD® Radeon™ R7 430 2GB VGA+DP 64bit Graphics Card

Engine Clock780 MHzMemory Clock1100 MHzMemory Size(width)1 GB(64-bit)Memory Type256M x 32 GDDR5Max. Resolution(HDMI)2048x1536

Max. Resolution(DP) 4096x2160@60Hz

Multi Display Support2 displaysHDCP ComplianceYes

**Rear I/O connectors(bracket)** VGA+DP

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

**Total power consumption(W)** <50W

PCB form-factor with bracket LP PCB with FH/LP bracket

### AMD® Radeon™ R7 430 2GB GDDR5 2DP 64 bit Graphics Card

 Engine Clock
 780 MHz

 Memory Clock
 1100 MHz

 Memory Size(width)
 1 GB(64-bit)

 Memory Type
 256M x 32 GDDR5

 Max. Resolution(DP)
 4096x2160@60Hz

Multi Display Support2 displaysHDCP ComplianceyesRear I/O connectors(bracket)DPx2

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <50W

PCB form-factor with bracket LP PCB with FH/LP bracket

### AMD® Radeon™ RX550 4 GB PCIe x16

Engine Clock 1183MHz

Memory Clock 6 Gbps

Memory Size(width) 4 GB(128-bit)

Memory Type GDDR5

 Max. Resolution(HDMI)
 4096x2160 @ 60Hz

 Max. Resolution(DP)
 5120x2880 @ 60Hz

Multi Display Support2 displaysHDCP ComplianceYesRear I/O connectors(bracket)HDMI, DP

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <50W

**PCB form-factor with bracket** LP (low profile) PCB with FH/LP bracket



## Technical Specifications – Graphics

### AMD Radeon™ 520 1GB Graphics Card

Engine Clock780 MHzMemory Clock1100 MHzMemory Size(width)1 GB (32-bit)Memory Type256M x 32 GDDR5

 Memory Type
 256M x 32 GDDR5

 Max. Resolution(DP)
 2048x1536@60Hz

Multi Display Support2 displaysHDCP ComplianceYesRear I/O connectors(bracket)VGA+DP

**Cooling(active/passive)** Active fan-sink (Active cooling with dynamic speed)

Total power consumption(W) <50W

PCB form-factor with bracket LP PCB with FH/LP bracket



## Technical Specifications – Graphics

### HP EliteOne 800 G6 23.8-in All-in-One

Intel® UHD Graphics (integrated)

**VGA Controller** Integrated

Multimode capable; supports HDCP, Display Port Audio (2 streams), HBR2 link rates and Multi-DisplayPort™ 1.4

Stream Technology for a maximum of 3 displays (including the integrated panel and all

attached displays)

HDMI-in Support HDMI-In

The actual amount of maximum graphics memory can be >4GB. System memory is allocated Memory

for graphics as needed using Intel's Dynamic Video Memory Technology (DVMT), to provide an

optimal balance between graphics and system memory use.

up to 10 bits/color **Maximum Color Depth** 

**HEVC 10b Enc/Dec HW** 

VP9 10b Dec HW

**Graphics/Video API Support HDR** 

> Rec. 2020 DX12

Max. Resolution (VGA) 2048 x 1536@60Hz Max. Resolution (HDMI) 4096 x 2160@60Hz Max. Resolution (DP) 4096 x 2160@60Hz

AMD® R19M

Discrete GPU **Architecture** 

AMD® GPU drives the integrated panel and all of the graphics output ports

**DisplayPort** Multimode capable; supports HDCP, HDR, Display Port Audio (6 streams max), DisplayPort HBR3

link rates and Multi-Stream Technology for a maximum of 5 3 displays (including the integrated

panel and all attached displays)

Support HDMI-In HDMI-In

3GByte, 128bit wide GDDR6 Memory

**Maximum Color Depth** up to 12 bits/color

**Graphics/Video API Support** DirectX 12

> OpenCL 2.0 OpenGL 4.5

AMD® Unified Video Decoder (UVD)

Max. Resolution (DP) 4096 x 2160@60Hz

Nvidia ® N18E-G2R

**Architecture** Discrete GPU

NVidia® GPU drives the integrated panel and all of the graphics output ports

Multimode capable; supports HDCP, HDR, Display Port Audio (6 streams max), DisplayPort HBR3 DisplayPort

link rates and Multi-Stream Technology for a maximum of 3 displays (including the integrated

panel and all attached displays)

HDMI-In Support HDMI-In

Memory 8GByte, 128bit wide GDDR6

**Maximum Color Depth** up to 12 bits/color

**Graphics/Video API Support** DirectX 12

OpenCL 2.0 OpenGL 4.5

Max. Resolution (DP) 4096 x 2160@60Hz



## Technical Specifications – Storage

### **STORAGE**

#### 500GB 7200RPM 3.5in SATA HDD

500GB Capacity **Rotational Speed** 7,200 rpm Interface SATA 6.0 Gb/s

**Buffer Size** 32MB

**Logical Blocks** 976,773,168 **Seek Time** 11 ms (Average) Height 1in/2.54cm

Width Media diameter: 3.5 in/8.89 cm

Physical size: 4 in/10.2 cm

41° to 131° F (5° to 55° C) **Operating Temperature** 

NOTE: For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

#### 1TB 7200RPM 3.5in SATA HDD

Capacity 1TB

**Rotational Speed** 7,200 rpm Interface SATA 6 Gb/s **Buffer Size** 64MB

**Logical Blocks** 1,953,525,168 **Seek Time** 11 ms (Average) Height 1in/2.54cm

Width (nominal) Media diameter: 3.5 in/8.89 cm

Physical size: 4 in/10.2 cm

41° to 131° F (5° to 55° C) **Operating Temperature** 

NOTE: For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

#### 2TB 7200RPM 3.5in SATA HDD

Capacity 2TB

**Rotational Speed** 7,200 rpm Interface SATA 6 Gb/s **Buffer Size 64MB** 

3,907,050,336 **Logical Blocks Seek Time** 11 ms (Average) Height 1.028in/26.11mm

Width (nominal) Media diameter: 3.5 in/88.9 mm

Physical size: 4 in/102 mm

**Operating Temperature** 41° to 131° F (5° to 55° C)



## Technical Specifications – Storage

#### 500GB 7200RPM 2.5in SATA HDD

Capacity 500GB **Rotational Speed** 7,200 rpm Interface SATA 6 Gb/s **Buffer Size** Up to 128MB **Logical Blocks** 976,773,168 **Seek Time** 12 ms (Average) Heiaht 0.283in/7.2mm (Max.) Width (nominal) 2.75in/70mm (nominal) **Operating Temperature** 41° to 131° F (5° to 55° C)

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

#### 1TB 7200RPM 2.5in SATA HDD

Capacity 1TB

Rotational Speed 7,200 rpm

Interface SATA 6 Gb/s

Buffer Size Up to 128MB

Logical Blocks 1,953,525,168

Seek Time 12 ms (Average)

Height0.283in/7.2mm (Max)Width (nominal)2.75in/70mm (nominal)Operating Temperature41° to 131° F (5° to 55° C)

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

#### 2TB 5400RPM 2.5in SATA HDD

Capacity 2TB

Rotational Speed 5,400 rpm
Interface SATA 6 Gb/s
Buffer Size 128MB

**Logical Blocks** 3,907,050,336 **Seek Time** 12 ms (Average)

Height0.374in/9.5mm (nominal)Width (nominal)2.75in/70mm (nominal)Operating Temperature41° to 131° F (5° to 55° C)



## Technical Specifications – Storage

## 500GB 7200RPM 2.5in Self Encrypted OPAL2 SATA HDD

Capacity 500GB

Architecture Self-Encrypting (SED) Solid State Drive with SATA interface

Interface SATA 6 Gb/s
Buffer Size 128 MB
Logical Blocks 976,773,168
Seek Time 12 ms (Average)

 Height
 0.283in/7.2mm (nominal)

 Width
 2.75in/70mm (nominal)

 Operating Temperature
 41° to 131° F (5° to 55° C)

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

### 500GB 7200RPM 2.5in Self Encrypted Federal Information Processing Standard SATA HDD

Capacity 500GB

Architecture Self-Encrypting (SED) Solid State Drive with SATA interface

Interface SATA 6 Gb/s
Buffer Size 128 MB
Logical Blocks 976,773,168
Seek Time 12 ms (Average)

 Height
 0.283in/7.2mm (nominal)

 Width
 2.75in/70mm (nominal)

 Operating Temperature
 41° to 131° F (5° to 55° C)

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

#### 256GB M.2 2280 PCIe NVMe SSD

Drive Weight< 10g</td>Capacity256GBHeight2.38mmLength80mmWidth22mmInterfacePCIE Gen3

Maximum Sequential ReadUp to 1600MB/sMaximum Sequential WriteUp to 780MB/sLogical Blocks500,118,192

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

**Features** APST; ASPM L1.2; NVME spec 1.2



## Technical Specifications – Storage

#### 512GB M.2 2280 PCIe NVMe SSD

Drive Weight < 10g
Capacity 512GB
Height 2.38mm
Length 80mm
Width 22mm
Interface PCIE Gen3

Maximum Sequential ReadUp to 1600MB/sMaximum Sequential WriteUp to 860MB/sLogical Blocks1,000,215,216

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

**Features** APST; ASPM L1.2; NVME spec 1.2

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

### 128GB M.2 2280 PCIe NVMe Three Layer Cell SSD

**Drive Weight** < 10q 128GB Capacity Height 2.38mm Length 80mm Width 22<sub>mm</sub> Interface PCIE Gen3 **Maximum Sequential Read** Up to 2800MB/s **Maximum Sequential Write** Up to 600MB/s **Logical Blocks** 250,069,680

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

Features APST: ASPM L1.2: NVME spec 1.2

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

#### 256GB M.2 2280 PCIe NVMe Three Layer Cell SSD

**Drive Weight** < 10a Capacity 256GB Height 2.38mm Length 80mm Width 22<sub>mm</sub> Interface PCIE Gen3 **Maximum Sequential Read** Up to 2700MB/s **Maximum Sequential Write** Up to 1000MB/s **Logical Blocks** 500,118,192

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

**Features** APST; ASPM L1.2; NVME spec 1.2



Technical Specifications – Storage

### 512GB M.2 2280 PCIe NVMe Three Layer Cell SSD

Drive Weight < 10g
Capacity 512GB
Height 2.38mm
Length 80mm
Width 22mm
Interface PCIE Gen3

Maximum Sequential ReadUp to 2900MB/sMaximum Sequential WriteUp to 1100MB/sLogical Blocks1,000,215,216

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

**Features** APST; ASPM L1.2; NVME spec 1.2

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

### 1TB M.2 2280 PCIe NVMe Three Layer Cell SSD

**Drive Weight** < 10q Capacity 1TB Height 2.38mm Length 80mm Width 22<sub>mm</sub> Interface PCIE Gen3 **Maximum Sequential Read** Up to 3480MB/s **Maximum Sequential Write** Up to 3037MB/s

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

2,000,409,264

Features TRIM: ASPM L1.2

**Logical Blocks** 

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

#### 2TB M.2 2280 PCIe NVMe Three Layer Cell SSD

**Drive Weight** < 10a Capacity 2TB Height 2.38mm Length 80mm Width 22<sub>mm</sub> Interface PCIE Gen3 **Maximum Sequential Read** Up to 3500MB/s **Maximum Sequential Write** Up to 3000MB/s **Logical Blocks** 3,907,029,168

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

Features TRIM; ASPM L1.2



## Technical Specifications – Storage

### 256GB M.2 2280 PCIe NVMe Self Encrypted OPAL2 Three Layer Cell SSD

Drive Weight < 10g
Capacity 256GB
Height 2.38mm
Length 80mm
Width 22mm
Interface PCIE Gen3

Maximum Sequential ReadUp to 2700MB/sMaximum Sequential WriteUp to 1000MB/sLogical Blocks500,118,192

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

Features APST; ASPM L1.2; NVME spec 1.2; TCG-OPAL2 security

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

### 512GB M.2 2280 PCIe NVMe Self Encrypted OPAL2 Three Layer Cell SSD

**Drive Weight** < 10q Capacity 512GB Height 2.38mm Length 80mm Width 22<sub>mm</sub> Interface PCIE Gen3 **Maximum Sequential Read** Up to 2900MB/s **Maximum Sequential Write** Up to 1100MB/s **Logical Blocks** 1,000,215,216

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

Features APST: ASPM L1.2: NVME spec 1.2: TCG-OPAL2 security

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

### 256GB Intel® PCIe® NVMe™ QLC + 16GB Intel® Optane™

**Drive Weight** < 10a Capacity 256GB Height 2.38mm Length 80mm Width 22<sub>mm</sub> Interface PCIe Gen3 **Maximum Sequential Read** Up to 1450MB/s **Maximum Sequential Write** Up to 500MB/s **Logical Blocks** 500,118,192

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

Features TRIM; ASPM L1.2



### Technical Specifications – Storage

### 512GB Intel® PCIe® NVMe™ QLC + 32 GB Intel® Optane™

Drive Weight < 10g
Capacity 512GB
Height 2.38mm
Length 80mm
Width 22mm
Interface PCle Gen3

Maximum Sequential ReadUp to 2400MB/sMaximum Sequential WriteUp to 1300MB/sLogical Blocks1,000,215,215

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

Features TRIM; ASPM L1.2

**NOTE:** For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

### **HP 9.5mm Slim DVD-ROM Drive**

**Height** 9.5 mm height

**Orientation** Either horizontal or vertical

Interface type SATA/ATAPI

**Dimensions (W x H x D)** 5.04 x 0.37 x 5.0 in (128 x 9.5 x 127 mm) without bezel

Weight (max) Up to 0.31 lb (140g) without bezel

**Read Speeds** DVD+R/-R/+RW/

-RW/+R DL /-R DL Up to 8X DVD-ROM Up to 8X CD-ROM, CD-R Up to 24X CD-RW Up to 24X

Access time

(typical reads, including

settling)

**Power** 

Source Slimline SATA DC power receptacle

DC Power Requirement 5 VDC ± 5%-100 mV ripple p-p DC Current 5 VDC (< 1000 mA typical, 1600 mA maximum)

Random: DVD-ROM: 170 ms (typical), CD-ROM: 170 ms (typical)

Full stroke: DVD-ROM: 320 ms (typical), CD-ROM: 320 ms (typical)

**Environmental conditions** Temperature 41° to 122° F (5° to 50° C)

(operating - non-condensing) Relative Humidity 10% to 80%

Maximum Wet Bulb Temperature 84° F (29° C)

### **HP 9.5mm Slim DVD Writer Drive**

**Height** 9.5 mm height

**Orientation** Either horizontal or vertical

Interface type SATA/ATAPI

**Disc recording capacity** Up to 8.5 GB DL or 4.7 GB standard

**Dimensions (W x H x D)** 5.04 x 0.37 x 5.0 in (128 x 9.5 x 127 mm) without bezel

Weight (max) 0.31 lb (140 g)
Write Speeds DVD-R DL - Up to 6X

DVD+R - Up to 8X DVD+RW - Up to 8X



## Technical Specifications – Storage

DVD+R DL - Up to 6X DVD-R - Up to 8X DVD-RW - Up to 6X CD-R - Up to 24X CD-RW - Up to 10X

DVD-RW, DVD+RW - Up to 8X

Read Speeds DVD-R DL, DVD+R DL - Up to 8X

DVD+R, DVD-R - Up to 8X

DVD-ROM DL, DVD-ROM - Up to 8X

CD-ROM, CD-R - Up to 24X

CD-RW - Up to 24X

Access time

(typical reads, including

Full Stroke DVD-ROM: 320 ms (typical), CD-ROM: 320 ms (typical) Stop Time 6 seconds (typical)

settling)

**Power** 

Source Slimline SATA DC power receptacle

DC Power Requirement 5 VDC ± 5%-100 mV ripple p-p

DC Current 5 VDC (< 1000 mA typical, 1600 mA maximum)

Random DVD-ROM: 170 ms (typical), CD-ROM: 170 ms (typical)

Environmental conditions

Temperature 41° to 122° F (5° to 50° C)

(operating - non-condensing) Relative Humidity 10% to 80%

Maximum Wet Bulb Temperature 84° F (29° C)

### **HP 9.5mm Slim Blu-Ray Writer Drive**

**Height** 9.5 mm height

**Orientation** Either horizontal or vertical

Interface type SATA/ATAPI

**Disc recording capacity**Up to 128 GB QL, 100 GB TL, 50 GB DL or 25 GB standard SL **Dimensions (W x H x D)**5.04 x 0.37 x 5.0 in (128 x 9.5 x 127 mm) without bezel

**Weight (max)** 0.29 lb (132 g)

Write Speeds BD-R SL/DL Up to 6X

BD-R TL/QL Up to 4X
BD-R Up to 6X
BD-RE Up to 2X
DVD-R Up to 8X
DVD-R DL - Up to 6X
DVD-RW Up to 6X
DVD+R Up to 8X
DVD+R DL - Up to 6X
DVD+R DL - Up to 6X
DVD+RW Up to 8X
DVD-RAM Up to 5X
CD-R Up to 24X
CD-RW Up to 10X

**Read Speeds** BD-ROM Up to 6X

BD-R Up to 6X
BD-RE SL/DL Up to 6X
BD-RE TL Up to 4X
DVD-ROM Up to 8X
DVD-R SL/DL Up to 8X
DVD-R Up to 8X
DVD-RW Up to 8X
DVD-RW Up to 8X
DVD+R SL/DL Up to 8X

DVD+R Up to 8X DVD+RW Up to 8X



## Technical Specifications – Storage

**BDMV (AACS Compliant** 

Disc)

Up to 6x/2x (Read/Play) DVD-RAM Up to 5x DVD-Video (CSS Compliant Disc)

Up to 8x/4x (Read/Play) CD-R/RW/ROM Up to 24x

CD-DA (DAE) Up to 24X/10X (Read/Play)

**Access time** 

Random BD-ROM: 205 ms (typical), DVD-ROM: 185 ms (typical), (typical reads, including CD-ROM: 165 ms (typical)

settling)

Full Stroke BD-ROM: 350 ms (typical), DVD-ROM: 345 ms (typical),

CD-ROM: 340 ms (typical)

Source Slimline SATA DC power receptacle **Power** 

> DC Power Requirement 5 VDC ± 5%-100 mV ripple p-p DC Current 5 VDC -1200 mA typical, 2000 mA maximum

**Environmental conditions** (operating - non-condensing) Temperature 41° to 122° F (5° to 50° C)

Relative Humidity 10% to 80%

Maximum Wet Bulb Temperature 84° F (29° C)



Technical Specifications – Networking and Communications

## **NETWORKING AND COMMUNICATIONS**

Intel® I219-LM 1 Gigabit	Network Connection LOM (vPro)	
Connector	RJ-45	
System Interface	PCI (Intel proprietary) + SMBus	
Data rates supported	10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14) 100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30) 1000 Mbit/s operation (1000BASE-T; IEEE 802.3ab; IEEE 8023 clauses 40) Auto-Negotiation (Automatic Speed Selection) Full Duplex Operation at all Speeds, Half Duplex operation at 10 and 100 Mbit/s	
IEEE Compliance	IEEE 802.1p QoS (Quality of Service) Support IEEE 802.1q VLAN support IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable) IEEE 802.3az EEE (Energy Efficient Ethernet)	
Performance	TCP/IP/UDP Checksum Offload (configurable) Protocol Offload (ARP & NS) Large send offload and Giant send offload Receiving Side Scaling (Hash Mode Only) Jumbo Frame 9K	
Power consumption	Cable Disconnetion: 25mW 100Mbps Full Run: 450mW 1000bp Full Run: 1000mW WoL Enable(S3/S4/S5): 50mW WoL Disable(S3/S4/S5): 25mW	
Power	ACPI compliant – multiple power modes	
Management	Situation-sensitive features reduce power consumption  Advanced link down power saving for reducing link down power consumption	
Management Interface	Auto MDI/MDIX Crossover cable detection	
IT Manageability	Wake-on-LAN from modern standby or sleep state (Magic Packet and Microsoft Wake-Up Frame); Wake-on-LAN from off (Magic Packet only) PXE 2.1 Remote Boot Statistics Gathering (SNMP MIB II, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30)) Comprehensive diagnostic and configuration software suite Virtual Cable Doctor for Ethernet cable status	
Security & Manageability	Intel® vPro® support with appropriate Intel® chipset components	

Intel® I225-LM 2.5 Gigabit Network Connection LOM (non-vPro)		
Connector	RJ-45	
System Interface	PCI (Intel proprietary) + SMBus	
Data rates supported	1. 10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14)	
	2. 100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30)	
	3. 1000 Mbit/s operation (1000BASE-T; IEEE 802.3ab; IEEE 802.3 clauses 40)	
	4. 2.5 Gbit/s operation( 2.5GBASE-T; IEEE 802.3bz Clause 126)	
	5. Auto-Negotiation (Automatic Speed Selection)	
	Full Duplex Operation at all Speeds, Half Duplex operation at 10, 100 & 1000 Mbit/s	



IEEE Compliance	
ieee computance	IEEE 802.1p QoS (Quality of Service) Support
	IEEE 802.1q VLAN support
	IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable)
	IEEE 802.3az EEE (Energy Efficient Ethernet)
	IEEE 802.3i 10BASE-T
	IEEE 802.3u 100BASE-TX
	IEEE 802.3ab 1000BAE-T
	IEEE 802.3bz 2.5GBASE-T
Performance	TCP/IP/UDP Checksum Offload (configurable)
	Protocol Offload (ARP & NS)
	Large send offload and Giant send offload
	Receiving Side Scaling
	Jumbo Frame 9K
Power consumption	Cable Disconnetion: 25mW
	100Mbps Full Run: 450mW
	1000bp Full Run: 1000mW
	WoL Enable(S3/S4/S5): 50mW
	WoL Disable(S3/S4/S5): 25mW
Power	
Management	ACPI compliant – multiple power modes
	Situation-sensitive features reduce power consumption
	Advanced link down power saving for reducing link down power consumption
Management Interface	Auto MDI/MDIX Crossover cable detection
IT Manageability	Wake-on-LAN from standby and hibernation (Magic Packet and Microsoft Wake-Up Frame); Wake-on-LAN from off (Magic Packet only)
	PXE 2.1 Remote Boot
	Statistics Gathering (SNMP MIB II, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30))
	Comprehensive diagnostic and configuration software suite
	Virtual Cable Doctor for Ethernet cable status
Security & Manageability	Intel® vPro™ support with appropriate Intel® chipset components

Intel® i210 10/100/1000 NIC		
Connector	RJ-45	
System Interface	PCI (Intel proprietary) + SMBus	
Data rates supported	10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14) 100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30) 1000 Mbit/s operation (1000BASE-T; IEEE 802.3ab; IEEE 8023 clauses 40)	



	Auto-Negotiation (Automatic Speed Selection)
	Full Duplex Operation at all Speeds, Half Duplex operation at 10 and 100 Mbit/s
IEEE Compliance	IEEE 802.1p QoS (Quality of Service) Support
companie	IEEE 802.1q VLAN support
	IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable)
	IEEE 802.3az EEE (Energy Efficient Ethernet)
Performance	TCP/IP/UDP Checksum Offload (configurable)
renomiance	Protocol Offload (ARP & NS)
	Large send offload and Giant send offload
	Receiving Side Scaling
	Jumbo Frame 9K
Power consumption	Cable Disconnetion: 25mW
	100Mbps Full Run: 450mW
	1000bp Full Run: 1000mW
	WoL Enable(S3/S4/S5): 50mW
	WoL Disable(S3/S4/S5): 25mW
Power	ACPI compliant – multiple power modes
Management	Situation-sensitive features reduce power consumption
	Advanced link down power saving for reducing link down power consumption
Management Interface	Auto MDI/MDIX Crossover cable detection
IT Manageability	Wake-on-LAN from standby and hibernation (Magic Packet and Microsoft Wake-Up Frame); Wake-
	on-LAN from off (Magic Packet only)
Security & Manageability	PXE 2.1 Remote Boot

Intel Wi-Fi 6 AX201 + BT5 (8	02.11ax 2x2, vPro, supporting gigabit file transfer speeds) vPro
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 <sup>3</sup>	• 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	Ad-hoc (Peer to Peer)		
Models	Infrastructure (Access Point Required)		
Roaming	IEEE 802.11 compliant roaming between access points		
Output Power <sup>2</sup>	• 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		
	• 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: 10mW		
	Radio disabled: 8 mW		
Power Management	ACPI and PCI Express compliant power management		
	802.11 compliant power saving mode		
Receiver Sensitivity <sup>3</sup>	•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 ambaddad dual band 2.4/5 CHa antagenes are availed to the send to a series and the		
	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 : 2.8g		
	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)		



Prequency Band   Legacy: 0-79 (1 MHz/CH)	LED Activity	LED Amber – Radio OFF; LED White – Radio ON		
Bluetooth® Specification 4.0/4.1/4.2/5.0/5.1 Compliant Frequency Band Number of Available Channels BE: 0-39 (2 MHz/CH) BE: 0-39 (2 MHz/CH) BE: 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: 5 Synchronous Connection Oriented links up to 3, 64 kbps, voice channels. Legacy: 4 Synchronous Connection Driented links up to 3, 64 kbps, voice channels. Legacy: 4 Synchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DHS) 864 kbps symmetric (3-EVS)  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.  Peak (TX) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW  Microsoft Windows Bluetooth® Software  Link Topology  Power Management  Microsoft Windows ACPI, and USB Bus Support  Certifications  FCC (47 CFR) Part 15C, Section 15.247 & 15.249  Power Management Certifications  BIUEtooth Profiles Supported  ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  Bluetooth Profiles Supported  BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer Ping LE Dual Mode LE Link Layer Ping LE Dual Mode LE Link Layer Le Low Duty Cycle Directed Advertising LE DCAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection Basic/Full LE Privacy 1.2 - Link Layer Privacy LE Privacy 1				
Prequency Band   Legacy: 0-79 (1 MHz/CH)	HP Integrated Module with Bluet	cotn° 4.0/4.1/4.2/5.0/5.1 wireless recnnology		
Number of Available Channels  Legacy: 0.79 (1 MHz/CH) BLE: 0-39 (2 MHz/CH) BLE: 0-39 (2 MHz/CH) BLE: 0-39 (2 MHz/CH) BLE: 0-39 (2 MHz/CH) BLE: 1 Mbps data rate; throughput up to 0.2 Mbps  Legacy: Synchronous Connection Oriented links up to 3, 64 kbps, voice channels. Legacy: Synchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) 854 kbps symmetric (3-EV5) The Bluetooth® component shall operate as a Class II Bluetooth® device with a maximum transmit power of 9-9.5 dBm for BR and EDR.  Power Consumption Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW  Bluetooth® Software Supported Link Topology Power Management FCC (47 CFR) Part 15C, Section 15.247 & 15.249  FCS (30 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  Bluetooth Profiles Supported  BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer Ping LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection-Basic/Full LE Privacy 1.2 - Link Layer Privacy LE Privacy 1.2 - Link Layer Privacy LE Privacy 1.2 - Link Layer Privacy LE Privacy 1.2 - Lestended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP) Hands Free Profile (HSP) Hands Free Profile (HSP) Hands Free Profile (HSP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)	Bluetooth® Specification	4.0/4.1/4.2/5.0/5.1 Compliant		
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 : Synchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-EVS)  864 kbps symmetric (3-EVS)  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.  Peak (Tx) 330 mW  Peak (Rx) 230 mW  Selective Suspend 17 mW  Bluetooth® Software Supported  Link Topology  Power Management  Microsoft Windows Bluetooth® Software  Link Topology  Power Management 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  B74.1-ESR 5/6/7 Compliance  LE Link Layer Ping  LE Low Duty Cycle Directed Advertising  LE Le Low Duty Cycle Directed Advertising  LE LECAP Connection Oriented Channels  Train Nudging & Interlaced Scan  B74.2 ESR08 Compiliance  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)	Frequency Band	2402 to 2480 MHz		
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-DHS) 864 kbps symmetric (3-EVS)  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.  Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW  Bluetooth® Software Supported Link Topology  Power Management  Microsoft Windows Bluetooth® Software Link Topology  Power Management Certifications  ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  Bluetooth Profiles Supported  ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer Ping LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 – Link Layer Privacy LE Privacy 1.2 – Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (HSP) Hands Free Profile (HSP) Hands Free Profile (HSP) Hands Free Profile (HSP) Hands Profile (HSP) Hands Profile (HSP) Advanced Audio Distribution Profile (A2DP)	Number of Available Channels	BLE : 0~39 (2 MHz/CH)		
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-DHS) 864 kbps symmetric (3-EVS)  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.  Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW  Bluetooth® Software Supported Link Topology  Power Management  Microsoft Windows Bluetooth® Software  Link Topology  Power Management Certifications  ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  Bluetooth Profiles Supported  BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE LCAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESROS Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 - Link Layer Pivacy LE Privacy 1.2 - Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)	Data Rates and Throughput	Legacy : 3 Mbps data rate; throughput up to 2.17 Mbps		
Legacy : Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) 864 kbps symmetric (3-EV5) Transmit Power The Bluetooth® component shall operate as a Class II Bluetooth® device with a maximum transmit power of +9.5 dBm for BR and EDR.  Power Consumption Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW  Bluetooth® Software Supported Link Topology Microsoft Windows Bluetooth® Software Link Topology Power Management FCC (47 CFR) Part 15C, Section 15.247 & 15.249  Power Management Certifications ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  Bluetooth Profiles Supported BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE 12CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR80 Compliance LE Secure Connection - Basic/Full LE Privacy 1.2 - Link Layer Privacy 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) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)		BLE : 1 Mbps data rate; throughput up to 0.2 Mbps		
transmit power of +9.5 dBm for BR and EDR.  Power Consumption Peak (Rx) 230 mW Selective Suspend 17 mW  Bluetooth® Software Supported Link Topology Power Management Microsoft Windows Bluetooth® Software  Microsoft Windows ACPI, and USB Bus Support  Certifications FCC (47 CFR) Part 15C, Section 15.247 & 15.249  Power Management Certifications ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  Bluetooth Profiles Supported BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 — Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Heads Step Profile (HFP) Hands Step Profile (HFP) Advanced Audio Distribution Profile (A2DP)		Legacy: Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) or		
Peak (Rx) 230 mW Selective Suspend 17 mW  Bluetooth® Software Supported Link Topology  Power Management  Certifications  FCC (47 CFR) Part 15C, Section 15.247 & 15.249  Power Management Certifications  ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  Bluetooth Profiles Supported  BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer Ping LE Le Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 −Link Layer Privacy LE Privacy 1.2 −Link Layer Privacy LE Privacy 1.2 −Lextended 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)	Transmit Power	The Bluetooth® component shall operate as a Class II Bluetooth® device with a maximum		
Description	Power Consumption	Peak (Rx) 230 mW		
Power Management Certifications  ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  Bluetooth Profiles Supported  BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection-Basic/Full LE Privacy 1.2 -Link Layer Privacy LE Privacy 1.2 -Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)	Bluetooth® Software Supported Link Topology	·		
Power Management Certifications  ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark  BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 - Link Layer Privacy LE Privacy 1.2 - Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)	Power Management	Microsoft Windows ACPI, and USB Bus Support		
Low Voltage Directive IEC950 UL, CSA, and CE Mark  BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 — Link Layer Privacy LE Privacy 1.2 — Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)	Certifications	FCC (47 CFR) Part 15C, Section 15.247 & 15.249		
LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 –Link Layer Privacy LE Privacy 1.2 –Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)	Power Management Certifications	Low Voltage Directive IEC950		
	Bluetooth Profiles Supported	LE Link Layer Ping LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 –Link Layer Privacy LE Privacy 1.2 –Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP)		
Security & Manageability Intel® vPro™ support with appropriate Intel® chipset components	Security & Manageability	Intel® vPro™ support with appropriate Intel® chipset components		

Intel Wi-Fi 6 AX201 + BT5 (802.11ax 2x2, non-vPro, supporting gigabit file transfer speeds) non-vPro		
Wireless LAN Standards	IEEE 802.11a	
	IEEE 802.11b	
	IEEE 802.11g	
	IEEE 802.11n	
	IEEE 802.11ac	
	IEEE 802.11ax	



·	Treeworking and communications		
	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		
requency band	• 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		
D. L. D. L.	• 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 <sup>3</sup>	• 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	Ad-hoc (Peer to Peer)		
Models	Infrastructure (Access Point Required)		
Roaming	IEEE 802.11 compliant roaming between access points		
Output Power <sup>2</sup>	• 802.11b : +18.5dBm minimum		
output rower	• 802.11g: +17.5dBm minimum		
	• 802.11a : +18.5dBm minimum		
	• 802.11n HT20(2.4GHz) : +15.5dBm minimum		
	• 802.11n HT40(2.4GHz) : +13.5dBm minimum		
	• 802.11n HT20(5GHz): +15.5dBm minimum		
	• 802.11n HT40(5GHz): +14.5dBm minimum		
	• 802.11ac VHT80(5GHz) : +11.5dBm minimum		
	• 802.11ac VHT160(5GHz) : +11.5dBm minimum		
	• 802.11ax HT40(2.4GHz) : +10dBm minimum		
	• 802.11ax VHT160(5GHz) : +10dBm minimum		
Power Consumption	• Transmit mode 2.0 W		
	• Receive mode 1.6 W		
	• Idle mode (PSP) 180 mW (WLAN Associated)		
	• Idle mode 50 mW (WLAN unassociated)		
	Connected Standby 10mW		
	• Radio disabled 8 mW		
Power Management	ACPI and PCI Express compliant power management		
-	802.11 compliant power saving mode		
Receiver Sensitivity <sup>3</sup>	•802.11b, 1Mbps : -93.5dBm maximum		
· <del></del>	•802.11b, 11Mbps : -84dBm maximum		





	• 802.11a/g. 6Mbi	os : -86dBm maximum		
		ops:-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 ambaddad di	ial hand 2.4/E.C.H.z. antonnas are provided to the card to support MI.AN		
		Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth communications		
Form Factor		liniCard with CNVi Interface		
Dimensions	1. Type 2230 : 2.3			
Difficusions		7 x 12.0 x 16.0 mm		
Weight	1. Type 2230 : 2.8			
weight.	2. Type 126: 1.3g	9		
Operating Voltage	3.3v +/- 9%			
Temperature	Operating	14° to 158° F (–10° to 70° C)		
per acar c	Non-operating	-40° to 176° F (-40° to 80° C)		
Humidity	Operating	10% to 90% (non-condensing)		
<b>-</b>	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		o OFF; LED Off – Radio ON		
HP Integrated Module with Blue		•••		
Bluetooth® Specification	4.0/4.1/4.2/5.0/5.	I Compliant		
Frequency Band	2402 to 2480 MHz			
Number of Available Channels	Legacy : 0~79 (1 M BLE : 0~39 (2 MHz/			
		ta rate: throughput up to 2.17 Mbps		
Data Rates and Throughput	Legacy : 3 Mbps da	ta rate, throughput up to 2.17 Mbps		
Data Rates and Throughput		ate; throughput up to 0.2 Mbps		
Data Rates and Throughput	BLE : 1 Mbps data r Legacy : Synchrono	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5)		
Data Rates and Throughput  Transmit Power	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchronor 864 kbps symmo The Bluetooth® co	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5)		
	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchronor 864 kbps symmo The Bluetooth® co	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum		
Transmit Power	BLE: 1 Mbps data r Legacy: Synchron Legacy: Asynchron or 864 kbps symmo The Bluetooth® co transmit power of	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum		
Transmit Power	BLE: 1 Mbps data r Legacy: Synchron Legacy: Asynchron or 864 kbps symme The Bluetooth® co transmit power of Peak (Tx) 330 mW	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.		
Transmit Power	BLE: 1 Mbps data r Legacy: Synchrond Legacy: Asynchrond or 864 kbps symmot The Bluetooth® contransmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.		
Transmit Power  Power Consumption  Bluetooth® Software Supported  Link Topology	BLE: 1 Mbps data r Legacy: Synchron or 864 kbps symme The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software		
Transmit Power  Power Consumption  Bluetooth® Software Supported Link Topology  Power Management	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchrono or 864 kbps symmo The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software  ACPI, and USB Bus Support		
Transmit Power  Power Consumption  Bluetooth® Software Supported  Link Topology	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchrono or 864 kbps symmo The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows FCC (47 CFR) Part 1	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software  ACPI, and USB Bus Support 5C, Section 15.247 & 15.249		
Transmit Power  Power Consumption  Bluetooth® Software Supported Link Topology  Power Management	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchrono or 864 kbps symmo The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows FCC (47 CFR) Part 1 ETS 300 328, ETS 3	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software  ACPI, and USB Bus Support 5C, Section 15.247 & 15.249 100 826		
Transmit Power  Power Consumption  Bluetooth® Software Supported Link Topology  Power Management	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchrono or 864 kbps symmo The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows FCC (47 CFR) Part 1	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software  ACPI, and USB Bus Support 5C, Section 15.247 & 15.249 00 826 ive IEC60950		
Transmit Power  Power Consumption  Bluetooth® Software Supported Link Topology  Power Management  Certifications	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchrono or 864 kbps symmo The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows Microsoft Windows FCC (47 CFR) Part 1 ETS 300 328, ETS 3 Low Voltage Direct UL, CSA, and CE Ma	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software  ACPI, and USB Bus Support 5C, Section 15.247 & 15.249 600 826 ive IEC60950 rk		
Transmit Power  Power Consumption  Bluetooth® Software Supported Link Topology  Power Management	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchrono or 864 kbps symmo The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows Microsoft Windows FCC (47 CFR) Part 1 ETS 300 328, ETS 3 Low Voltage Direct UL, CSA, and CE Ma BT4.1-ESR 5/6/7 C	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software  ACPI, and USB Bus Support 5C, Section 15.247 & 15.249 600 826 ive IEC60950 rk		
Transmit Power  Power Consumption  Bluetooth® Software Supported Link Topology  Power Management  Certifications	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchrono or 864 kbps symmo The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows Microsoft Windows FCC (47 CFR) Part 1 ETS 300 328, ETS 3 Low Voltage Direct UL, CSA, and CE Ma BT4.1-ESR 5/6/7 Co LE Link Layer Ping	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software  ACPI, and USB Bus Support 5C, Section 15.247 & 15.249 600 826 ive IEC60950 rk		
Transmit Power  Power Consumption  Bluetooth® Software Supported Link Topology  Power Management  Certifications	BLE: 1 Mbps data r Legacy: Synchrono Legacy: Asynchrono or 864 kbps symmo The Bluetooth® co transmit power of Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend Microsoft Windows Microsoft Windows FCC (47 CFR) Part 1 ETS 300 328, ETS 3 Low Voltage Direct UL, CSA, and CE Ma BT4.1-ESR 5/6/7 C	ate; throughput up to 0.2 Mbps ous Connection Oriented links up to 3, 64 kbps, voice channels. ous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) etric (3-EV5) mponent shall operate as a Class II Bluetooth® device with a maximum +9.5 dBm for BR and EDR.  17 mW Bluetooth® Software  ACPI, and USB Bus Support 5C, Section 15.247 & 15.249 600 826 ive IEC60950 rk		



LE L2CAP Connection Oriented Channels
Train Nudging & Interlaced Scan
BT4.2 ESR08 Compliance
LE Secure Connection- Basic/Full
LE Privacy 1.2 –Link Layer Privacy
LE Privacy 1.2 –Extended Scanner Filter Policies
LE Data Packet Length Extension
FAX Profile (FAX)
Basic Imaging Profile (BIP)2
Headset Profile (HSP)
Hands Free Profile (HFP)
Advanced Audio Distribution Profile (A2DP)

Realtek RTL8822CE 802.11a	B02.11ac 2x2 Wi-Fi + BT5		
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		
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 & 80MHz)		
Modulation	Direct Sequence Spread Spectrum		
	BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM		
Security <sup>3</sup>	• 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		
New code Aughternance	• WAPI		
Network Architecture	Ad-hoc (Peer to Peer)		
Models	Infrastructure (Access Point Required)		
Roaming	IEEE 802.11 compliant roaming between access points		
Output Power <sup>2</sup>	• 802.11b : +18.5dBm minimum		
	• 802.11g : +17.5dBm minimum		
	• 802.11a: +18.5dBm minimum		





		2.4GHz): +15.5dBm minimum	
	-	2.4GHz): +14.5dBm minimum	
		GGHz) : +15.5dBm minimum	
		GHz): +14.5dBm minimum	
		D(5GHz): +11.5dBm minimum	
		50(5GHz) : +11.5dBm minimum	
Power Consumption	<ul> <li>Transmit mode :</li> </ul>		
	• Receive mode :1	1. T. C.	
		180 mW (WLAN Associated)	
		W (WLAN unassociated)	
	<ul> <li>Connected Stand</li> </ul>	dby/Modern Standby: 10mW	
	Radio disabled: 8		
Power Management		ess compliant power management	
		power saving mode	
Receiver Sensitivity <sup>3</sup>		-93.5dBm maximum	
		: -84dBm maximum	
		s : -86dBm maximum	
		ps : -72dBm maximum	
	,	-67dBm maximum	
	,	-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 di	ual 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	•	x 22.0 x 30.0 mm	
Dillielisiolis		7 x 12.0 x 16.0 mm	
Weight			
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)	
remperature		-40° to 176° F (-40° to 80° C)	
11! 1!a	Non-operating	·	
Humidity	Operating	10% to 90% (non-condensing)	
A1.** 1	Non-operating	5% to 95% (non-condensing)	
Altitude	Operating	0 to 10,000 ft (3,048 m)	
IED A		0 to 50,000 ft (15,240 m)	
LED Activity	LED Amber – Radio OFF;		
	LED OFF – Radio C		
HP Integrated Module with Blu	etooth® 4.0/4.1/4.2	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 symmetr		
Transmit Dawer			
Transmit Power		omponent shall operate as a Class II Bluetooth® device with a maximum	
	transmit power of	+4 dBm for BR and EDR.	



Technical Specifications – Networking and Communications

Power Consumption	Peak (Tx) 330 mW		
<b>,</b>	Peak (Rx) 230 mW		
	Selective Suspend 17 mW		
Bluetooth® Software Supported Link Topology	Microsoft Windows Bluetooth® Software		
Power Management	Microsoft Windows ACPI, and USB Bus Support		
Certifications	FCC (47 CFR) Part 15C, Section 15.247 & 15.249		
Power Management Certifications	ETS 300 328, ETS 300 826		
	Low Voltage Directive IEC950		
	UL, CSA, and CE Mark		
Bluetooth Profiles Supported	BT4.1-ESR 5/6/7 Compliance		
	LE Link Layer Ping		
	LE Dual Mode		
	LE Link Layer		
	LE Low Duty Cycle Directed Advertising		
	LE L2CAP Connection Oriented Channels		
	Train Nudging & Interlaced Scan		
	BT4.2 ESR08 Compliance		
	LE Secure Connection- Basic/Full		
	LE Privacy 1.2 –Link Layer Privacy		
	LE Privacy 1.2 –Extended Scanner Filter Policies		
	LE Data Packet Length Extension		
	FAX Profile (FAX)		
	Basic Imaging Profile (BIP)2		
	Headset Profile (HSP)		
	Hands Free Profile (HFP)		
	Advanced Audio Distribution Profile (A2DP)		





Technical Specifications – Input/Output Devices

### I/O DEVICES

HP Wired Desktop 320K K	eyboard			
Physical Characteristics	Keys	104, 105, 107, 109 layout (depending on country)		
	Dimensions (L x W x H)	16.77 x 4.36 x 0.65 in (426.2 x 110.9 x 16.7 mm)		
	Weight	14.57 oz (413g)		
	Cable length	6 ft. (1.8 m)		
Electrical	Operating voltage	5V		
	Power consumption	50mA - 100 mA		
	System interface	USB		
Mechanical	Keycaps	Low-profile design		
	Switch actuation	60±10g nominal peak force with tactile feedback		
	Switch life	10 million keystrokes (Life tester)		
	Switch type	Plunger		
Environmental				
	Operating temperature	50° to 122° F (10° to 50° C)		
	Non-operating temperature	-22° to 149° F (-30° to 65° C)		
	Operating humidity	10% to 90% (non-condensing at ambient)		
	Non-operating humidity	0% to 90% (non-condensing at ambient)		
Approvals	FCC, ICES, CULus, CE, GS, EAC, U	FCC, ICES, CULus, CE, GS, EAC, Ukraine, India BIS, KCC, RCM, BSMI, VCCI		
Ergonomic compliance	TUVGS	TUVGS		
Kit contents	Keyboard, QSP, Warranty Card, Product Notice			

HP USB Premium Keyboard				
Physical Characteristics	Keys	104, 105 layout (depending upon country)		
	Dimensions (L x W x H)	17.04 x 5.55 x 0.52 in (433 x 141 x13.2 mm)		
	Weight	1.54 lb. (698g)		
	Operating voltage	5 VDC, +/-5%		
	Power consumption	35mA (All LED on)		
Electrical	System interface	USB Type A plug connector		
Electrical	ESD	Contact Discharge: 8 KV Air Discharge: 15 KV		
	EMI - RFI	Conforms to FCC rules for a Class B computing device		
	Microsoft® PC 99 - 2001	Functionally compliant		
Mechanical	Keycaps	Low-profile design		
	Switch actuation	60±10g nominal peak force with tactile feedback		



### Technical Specifications – Input/Output Devices

ch life	10 million keystrokes (Life tester)	
ch tupo	, and the state of	
ch type	Contamination-resistant switch membrane	
leveling mechanisms	For all double-wide and greater-length keys	
e length	6 ft. (1.8 m)	
osoft PC 99 - 2001	Mechanically compliant	
ıstics	43-dBA maximum sound pressure level	
rating temperature	50° to 122° F (10° to 50° C)	
operating temperature	-22° to 140° F (-30° to 60° C)	
rating humidity	10% to 90% (non-condensing at ambient)	
operating humidity	20% to 80% (non-condensing at ambient)	
rating shock	40 g, six surfaces	
-operating shock	80 g, six surfaces	
rating vibration	2-g peak acceleration	
operating vibration	4-g peak acceleration	
(out of box)	26 in (66 cm) on carpet, six-drop sequence	
(in box)	30 in (76.2 cm) on concrete, 16-drop sequence	
UL, FCC, CE Mark, TUV GS, VCCI, BSMI, RCM, KCC		
TUVGS		
Keyboard, QSP		
Product Notice		
	e length  psoft PC 99 - 2001  stics  ating temperature  operating temperature  ating humidity  operating humidity  ating shock  operating shock  ating vibration  operating vibration  (out of box)  (in box)  CC, CE Mark, TUV GS, VCCI, E	

HP Wired Desktop 320M	Mouse		
Dimensions (H x L x W)	4.08 x 2.49 x 1.39 in (103.8 x 63.4 x 35.5 mm)		
Weight	2.67 oz (75.8 g)		
Mechanical	Connector	USB	
	Resolution	1000 DPI	
	Sensor	Optical Red Sensor	
Tracking speed	Tracking acceleration	8G(max), 1G=9.8m/s2	
	Cable length	6 ft. (1.8 m)	
	Color	Jack Black	
Regulatory approvals	Compliant FCC, ICES, CULus, CE, GS, EAC, Ukraine. India BIS, KCC, RCM, BSMI, VCCI		

Technical Specifications – Input/Output Devices

HP USB Premium Mouse				
Dimensions (H x L x W)	4.21 x 2.64 x 1.52 in (107 x 67 x 38.7 mmm)			
Weight	0.19lb (90g)			
Environmental	Operating temperature	50° to 122°F (10° to 50° C)		
	Non-operating temperature	-22° to 140°F (-30° to 60° C)		
	Operating humidity	10% to 90% (non-condensing at ambient)		
	Non-operating humidity	20% to 80% (non-condensing at ambient)		
	Operating shock	50 g, 6 surfaces		
	Non-operating shock	80 g, 6 surfaces		
	Operating vibration	2 g peak acceleration		
	Non-operating vibration	4 g peak acceleration		
Electrical	Operating voltage	5 VDC, +/-5%		
	Power consumption	12mA		
Mechanical	Connector	USB 2.0		
	Туре	3D mouse (3 keys and wheel)		
	Resolution	800, 1200, 1600 DPI		
	Sensor	Pixart PAN3606DL		
Tracking speed	Tracking acceleration	8G(max), 1G=9.8m/s2		
	Cable length	6 ft. (1.8 m)		
	Color	Jack Black		
Regulatory approvals	Compliant UL, FCC, CE Mark, TUV GS, VCCI, BSMI, RCM, KCC			

HP USB Mouse				
Dimensions (H x L x W)	37mm x 115mm x 62.9	37mm x 115mm x 62.9mm		
Weight	90 +10g/- 5 g	90 +10g/- 5 g		
Color	Black	Black		
Connector	USB	USB		
Machania	Resolution	Resolution 800 DPI sensitivity		
Mechanical	Buttons	Buttons Two primary buttons and clickable scroll wheel		



### Technical Specifications – Audio/Multimeda

### **AUDIO/MULTIMEDIA**

### **HP EliteDesk 800 G6 Tower Business PC**

Type Integrated

HD Stereo Codec Conexant CX20632 / Realtek ALC 3867

Audio I/O Ports Front: 1 - Headset connector supports a CTIA style headset and is re-taskable as a Line-in, Line-

out, Microphone-in or Headphone-out port

1 - Headphone port Rear: 1 - Line-out

1 - Line-in which is retaskable as a Microphone Input

All ports are 3.5mm and support stereo

Internal Speaker Amplifier 2W class D mono amplifier for the internal speaker only. External speakers must be powered

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 front and rear jacks or integrated speaker.

Sampling Independent sampling rates for DAC's and ADC's; supports resolutions from 16 to 24-bit; 44.1 kHz

to 192 kHz for DAC and 44.1 kHz to 96 kHz for ADC

Wavetable Syntheses Yes - Uses OS soft wavetable

Analog Audio Yes

# of Channels on Line-Out Stereo (Left & Right channels)

Internal Speaker Yes

#### HP EliteDesk 800 G6 Small Form Factor Business PC

Type Integrated

HD Stereo Codec Conexant CX20632 / Realtek ALC 3867

Audio I/O Ports Front: 1 - Headset connector supports a CTIA style headset and is re-taskable as a Line-in, Line-

out, Microphone-in or Headphone-out port

1 - Headphone port Rear: 1 - Line-out

1 - Line-in which is retaskable as a Microphone Input

All ports are 3.5mm and support stereo

Internal Speaker Amplifier 2W class D mono amplifier for the internal speaker only. External speakers must be powered

Playback multi-streaming can be enabled in the audio control panel to allow independent audio

Multi-streaming Capable streams to be sent to/from the front and rear jacks or integrated speaker.

Independent sampling rates for DAC's and ADC's; supports resolutions from 16 to 24-bit; 44.1 kHz

Sampling to 192 kHz for DAC and 44.1 kHz to 96 kHz for ADC

Wavetable Syntheses Yes - Uses OS soft wavetable

Analog Audio Yes

# of Channels on Line-Out Stereo (Left & Right channels)

Internal Speaker Yes



### Technical Specifications – Audio/Multimeda

### **HP EliteDesk 800 G6 Desktop Mini Business PC**

Type Integrated

HD Stereo Codec Realtek ALC3205-CG / Realtek ALC 3867

Audio I/O Ports combo audio jack with CTIA and headset support

Internal Speaker Amplifier 2W class D mono amplifier for the internal speaker only. External speakers must be powered 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 front and rear jacks or integrated speaker.

Sampling Independent sampling rates for DAC's and ADC's; supports resolutions from 16 to 24-bit; 44.1 kHz

to 192 kHz for DAC and 44.1 kHz to 96 kHz for ADC

Wavetable Syntheses Yes - Uses OS soft wavetable

Analog Audio Yes

# of Channels on Line-Out Stereo (Left & Right channels)

Internal Speaker Yes

### HP EliteOne 800 G6 24 & 27 All-in-One

### **Bang & Olufsen Audio**

Type Integrated

HD Stereo Codec Realtek ALC3274

Side headset connector supports a CTIA/OMTP style headset and is re-taskable as a Line-in, Line-

out, Microphone-in or Headphone-out port

Side headphone connector supports a headphone connections

Rear line out connector

Audio I/O Ports All ports are 3.5mm and support stereo

Internal Speaker Amplifier 5W per channel class D stereo amplifier for the internal speakers only

Playback multi-streaming can be enabled in the audio control panel to allow independent audio

Multi-streaming Capable streams to be sent to/from the front and rear jacks or integrated speakers.

Independent sampling rates for DAC's and ADC's; supports resolutions from 16 to 24-bit; 44.1 kHz

Sampling to 192 kHz for DAC and 44.1 kHz to 96 kHz for ADC

Wavetable Syntheses Yes - Uses OS soft wavetable

Analog Audio Yes

# of Channels on Line-Out Stereo (Left & Right channels)

Internal Speaker Yes - Stereo



Technical Specifications – Integrated Webcam and Microphone

#### INTEGRATED WEBCAM AND MICROPHONE

Integrated Webcam and Microphone

Optional integrated 5 MP Full HD RGB webcam & microphone; maximum resolution of 2624 x 1976
Optional integrated 5 MP Full HD RGB dual-facing webcam with IR sensor (user-facing) & microphone; maximum resolution of 2624 x 1976

**NOTE:** All HP devices which carry the Bang & Olufsen brand are custom-tuned with Bang & Olufsen's acoustical engineers for precise sound experience in business use.

### INTEGRATED FINGERPRINT SENSOR

Sensor type: Touch

Fingerprint matching: Performed on device

Anti-Spoofing: Yes

Windows Hello Support: Yes Encryption: On sensor FIPS Compliant: No



### Technical Specifications – Power

#### **POWER**

### **HP EliteDesk 800 G6 Tower Business PC**

### **Unit Environment and Operating Conditions**

Temperature Range Operating: 5°C ~35°C

Non-Operating: -40°C ~66°C

Relative Humidity Operating 5% to 90% relative humidity at max inlet temperature

Non-Operating 5% to 95% relative humidity at max inlet temperature

Maximum Altitude Operating: 5000m

(unpressurized) Non-operating: 50,000 ft. (15240 m)

### **HP EliteDesk 800 G6 SFF Business PC**

#### **Unit Environment and Operating Conditions**

Temperature Range Operating: 5°C ~35°C

Non-Operating: -40°C ~66°C

Relative Humidity Operating 5% to 90% relative humidity at max inlet temperature

Non-Operating 5% to 95% relative humidity at max inlet temperature

Maximum Altitude Operating: 5000m

(unpressurized) Non-operating: 50,000 ft. (15240 m)

### HP EliteDesk 800 G6 Desktop Mini Business PC (35W)

### **Unit Environment and Operating Conditions**

Temperature Range Operating: 5°C ~35°C

Non-Operating: -40°C ~66°C

Relative Humidity Operating 5% to 90% relative humidity at max inlet temperature

Non-Operating 5% to 90% relative humidity at max inlet temperature

Maximum Altitude Operating: 5000m

(unpressurized) Non-operating: 50,000 ft. (15240 m)

#### HP EliteDesk 800 G6 Desktop Mini Business PC (65W)

### **Unit Environment and Operating Conditions**

Temperature Range Operating: 5°C ~35°C

Non-Operating: -40°C ~66°C

Relative Humidity Operating 5% to 90% relative humidity at max inlet temperature

Non-Operating 5% to 90% relative humidity at max inlet temperature

Maximum Altitude Operating: 5000m

(unpressurized) Non-operating: 50,000 ft. (15240 m)

### HP EliteDesk 800 G6 Desktop Mini Business PC (95W)

### **Unit Environment and Operating Conditions**

Temperature Range Operating: 5°C ~35°C

Non-Operating: -40°C ~66°C

Relative Humidity Operating 5% to 90% relative humidity at max inlet temperature

Non-Operating 5% to 90% relative humidity at max inlet temperature

Maximum Altitude Operating: 5000m

(unpressurized) Non-operating: 50,000 ft. (15240 m)



### Technical Specifications – Power

### HP EliteOne 800 G6 24 & 27 All-in-One

Unit Environment and Operating Conditions

Temperature Range Operating: 5°C ~45°C

Non-Operating: -40°C ~66°C

Relative Humidity Operating 5% to 90% relative humidity at max inlet temperature

Non-Operating 5% to 90% relative humidity at max inlet temperature

Maximum Altitude Operating: 5000m

(unpressurized) Non-operating: 50,000 ft. (15240 m)

	DM	SFF	TWR	AiO
External Power Supplies	65W EPS, 88% average efficiency at 115V & 89% at 230Vac 90W EPS, active PFC, 88% average efficiency at 115V & 89% at 230Vac 150W EPS, active PFC, 88% average efficiency at 115V & 89% at	N/A	N/A	N/A
80 PLUS Gold	N/A	N/A	N/A	N/A
80 PLUS Platinum		350W active PFC / 80 PLUS Platinum 260W active PFC / 80 PLUS Platinum 90/92/89% efficient at 20/50/100% load (115V) 91/93/90% efficient at 20/50/100% load (230V)	550W active PFC / 80 PLUS Platinum 350W active PFC / 80 PLUS Platinum 260W active PFC / 80 PLUS Platinum 90/92/89% efficient at 20/50/100% load (115V) 91/93/90% efficient at 20/50/100% load (230V)	210W active PFC / 80 PLUS Platinum 280W active PFC / 80 PLUS Platinum 90/92/89% efficient at 20/50/100% load (115V) 91/93/90% efficient at 20/50/100% load (230V)
Operating Voltage Range	90Vac~264Vac	90Vac~264Vac	90Vac~264Vac	90Vac~264Vac
Rated Voltage Range	100Vac~240Vac	100Vac~240Vac	100Vac~240Vac	100Vac~240Vac
Rated Line Frequency	50HZ~60HZ	50HZ~60HZ	50HZ~60HZ	50HZ~60HZ
Operating Line Frequency	47HZ~63HZ	47HZ~63HZ	47HZ~63HZ	47HZ~63HZ
Rated Input Current				
Rated Input Current with Energy Efficient* Power Supply		260W Platinum≤3.1A 350W Platinum≤4A	260W Platinum≤3.1A 350W Platinum≤4.2A 550W Platinum≤6.6A	210W ≦ 2.8A 280W ≦ 3.2A
DC Output	+19.5V	+12V	+12V	+20V





Technical Specifications – Power

Current Leakage (NFPA 99: Less than 500 Less than 500 Less than 500 Less than 500	
2012)   microamps of leakage   microamps of leakage   microamps of leakage   microamps	
current at 120 Vac with   current at 120 Vac with   current at 120 Vac with   current at 1	
the ground wire the ground wire the ground wire the ground wire	
disconnected, as disconnected, as disconnected, as	
required for Non-patient required for Non-patient required for Non-patient required for Non-patient	
Electrical Appliances   Electrical Appliances   Electrical Appliances   Electrical Appliances   Electrical Appliances	
and Equipment used in a and Equipment used in a Appliances a	
patient care facility or patient care facility or patient care facility or	
that contact patients in that contact patients in that contact patients in patient care	
normal use. Per section normal use. Per section normal use. Per section that contact	
10.3.5.1.   10.3.5.1.   10.3.5.1.   normal use.	Per section
Less than 100 le	
microamps of leakage microamps of leakage Less than 10	
current at 120 Vac with current at 120 Vac with current at 120 Vac with microamps	
the ground wire intact   the ground wire intact   the ground wire intact   current at 1	
with normal polarity, as with normal polarity, as the ground	
required for Non-patient required for Non-patient with normal	
Electrical Appliances Electrical Appliances required for	
and Equipment used in a and Equipment used in a and Equipment used in a patient Elec	
patient care facility or patient care facility or Appliances a	
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normal use. Per section normal use. Per section 10.3.5.1. patient care	
10.3.5.1.	
	Per Section
Power Supply Fan         N/A         70mm variable speed         70mm variable speed         N/A	
Power cord length         6.0 ft. (1.83 m)         6.0 ft. (1.83 m)         6.0 ft. (1.83 m)         6.0 ft. (1.83 m)	m)
External Power Adapter External power supply Internal power supply Internal power supply Internal power supply	ver supply
<b>Dimensions</b>   65W: 90 x 51 x 28.5mm   165 x 95 x 73mm   165 x 95 x 73mm   110 x 110 x	26mm
& 102 x 55 x 30mm	
90W: 126 x 50 x 30mm	
150W: 148 x 75.5 x	
25.4mm	
Total Cord Length         6.0 ft. (1.83m)         6.0 ft. (1.83m)         6.0 ft. (1.83m)         6.0 ft. (1.83m)	m)

### Technical Specifications – Power

The power supply shall comply with harmonic input current requirements as detailed in EN61000-3-2 and JEIDA MITI standards. The harmonic input current requirements must be met under the following operating conditions: Load Requirements: 50% and 100%

Input Voltage: 230Vac/50Hz.

For active power factor correction the power factor at 50% &100% loads shall be greater than 0.9 over the entire nominal input voltage range (100-127VAC and 200-240VAC).

Condition	Standard Efficiency	82/85/82%	85/88/85%	87/90/87%	90/92/89%	Input Voltage
10% of Rated Load	-	75%	81%	84%	86%	115Vac/60HZ
20% of Rated Load	-	82%	85%	87%	90%	115Vac/60HZ
50% of Rated	-	85%	88%	90%	92%	115Vac/60HZ
Load	PF>0.9	PF>0.9	PF>0.9	PF>0.9	PF>0.95	
100% of Rated	70%	82%	85%	87%	89%	115Vac/60HZ
Load	PF>0.9	PF>0.9	PF>0.9	PF>0.9	PF>0.9	230Vac/50HZ



Technical Specifications – Weights and Dimensions

### **WEIGHTS & DIMENSIONS**

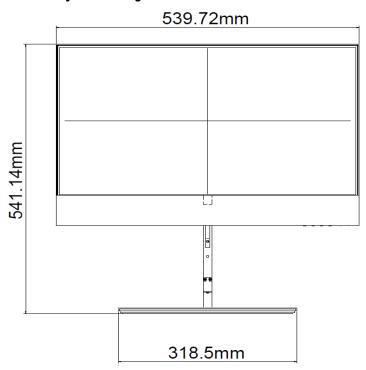
	DM	SFF	TWR	AiO
Chassis (W x D x H)	6.97 x 6.89 x 1.35in 177 x 175 x 34mm	13.3 x 12.13 x 3.94in 338 x 308 x 100mm	14.57 x 12.13 x 6.61in 370 x 308 x 168mm	See table below.
System Volume	63.4 cu in 1.05L	634.6 cu in 10.4 L	1186.8 cu in 19.14 L	See table below.
System Weight	3.13lb 1.42kg	13.5lb 6.13kg	21.74lb 9.86kg	See table below.
Max Supported Weight (desktop orientation)	: 0	77lb 35kg	77lb 35kg	See table below.
<b>Stand Dimensions</b>	160 x 117 x 18.5mm	151.8 x 200 x 37.2mm	N/A	See table below.
Packaging (W x D x H)	19.6 x 9.3 x 5.2in 498 x 235 x 132mm	15.71 x 19.65 x 9.06in 399 x 499 x 230mm	19.65 x 11.61 x 18.62in 499 x 295 x 473mm	See table below.
Shipping Weight	2.95kg 6.49lb	7.683kg 16.92lb	9.058kg 19.95lb	See table below.
Multipack Packaging (10 units)	20.28 x16.54 x 25in 515 x 420 x 63 mm			
Palletization Profile	10 units per layer 17 layers max 170 units per pallet 46.3 x 39.2 x 94.1in, 1175 x 996 x 2389mm (include pallet)	6 units per layer 10 layers max 60 units per pallet 1200 x 1000 x 2438mm (include the pallet)	8 units per layer 5 layers ax 40 units per pallet 1200 x 1000 x 2495mm (include the pallet)	10-units per layer 4-layers max 40-units per pallet (sea) 1200 x 1000 x 2470mm

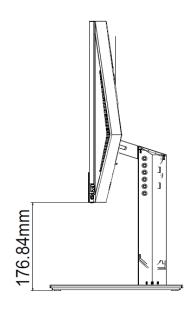


Technical Specifications – Weights and Dimensions

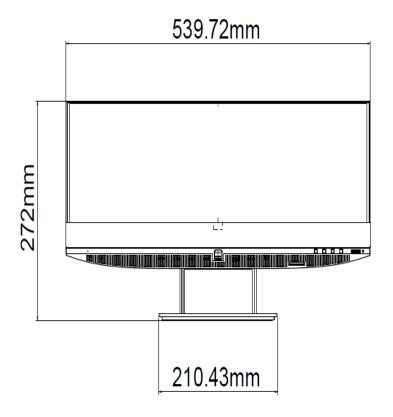
### STANDS AND DIMENSIONS

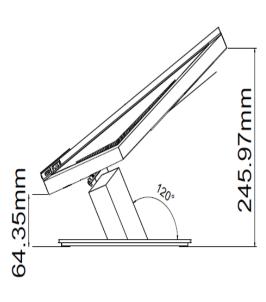
HP EliteOne G6 AIO Adjustable Height Stand - 23.8"





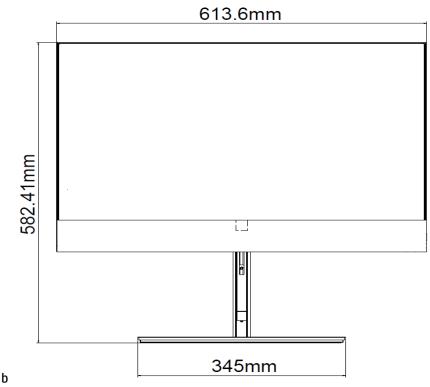
HP EliteOne G6 AIO Recline Stand - 23.8"

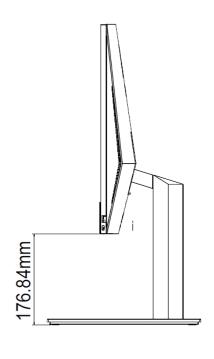




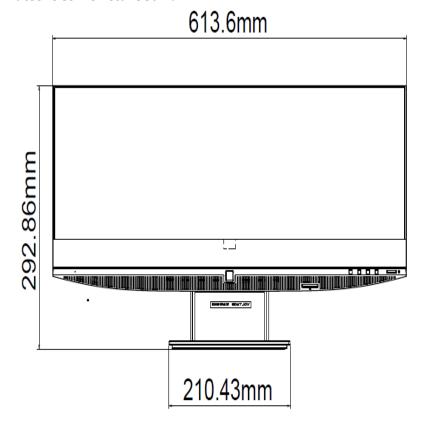
Technical Specifications – Weights and Dimensions

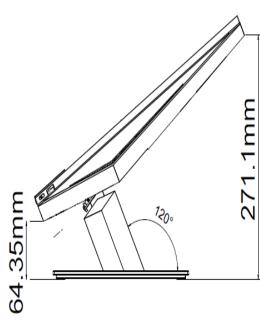
### HP EliteOne G6 A10 Adjustable Height Stand - 27"





HP EliteOne G6 AIO Recline Stand - 27"





### Technical Specifications – Weights and Dimensions

Adjustable Height Stand:	Height - Vertical/Landscape Adjustment	130mm (±2 mm)	
	Portrait Adjustment	No portrait	
	Tilt Angle	-5° to +18° (±2°) in landscape and portrait	
	Rotation (Swivel)	90° (±1°) (45 left, 45 right)	
	Pivot No pivot		

Recline Stand:	Height - Vertical Adjustment	No height
	Tilt Angle	+36.5° to +58° (+/-1.5°)
	Rotation (swivel)	No swivel



Technical Specifications – Weights and Dimensions

### **ALL-IN-ONE WEIGHTS AND DIMENSIONS**

### Weight without Touch Panel - 23.8"

Product Weight Unboxed	15.12 lbs. 6.86 kg	Adjustable Height Stand 20.46 lbs. 9.28 kg	Recline Stand 18.83 lbs. 8.54 Kg
Shipping Weight Boxed	19.51 lbs. 8.85 kg	Stand	Recline Stand 23.08 lbs. 10.47 kg
Shipping Weight Pallet (30 units)	623.7 lbs. 283.5 kg	Adjustable Height Stand 783.4 lbs. 356.1 kg	Recline Stand 730.62 lbs. 332.1 kg

### Weight with Touch Panel - 23.8"

Product Weight Unboxed	Without Stand 17.50 lbs. 7.94 kg	Adjustable Height Stand 22.84 lbs. 10.36 kg	Recline Stand 21.21 lbs. 9.62 Kg
Shipping Weight Boxed	Without Stand 21.89 lbs. 9.93 kg	Adjustable Height Stand 27.23 lbs. 12.35kg	Recline Stand 25.46 lbs. 11.55 kg
Shipping Weight Pallet (30 units)	Without Stand 694.98 lbs. 315.9 kg	Adjustable Height Stand 854.7lbs. 388.5kg	Recline Stand 801.9lbs. 364.5 kg

### Dimensions (W x D x H) - 23.8"

	Without Stand 539.72 x 364.3 x 57.3 mm	Stand (-5 ~ 20) degrees	Recline Stand Stand (30 ~ 60) degrees 539.72 x 379.44 x 209.35 mm
Product	Without Stand 539.72 x 364.3 x 59.3 mm	Adjustable Height	Recline Stand Stand (30 ~ 60) degrees
(Sure View/ In-cell Touch)			539.72 x 379.44 x 211.35 mm

### Shipping Dimensions - 23.8"

- 11 3	· <b>,</b> · · · · · · · · · · · · · · · · · · ·	Recline Stand 628 x 186 x 635 mm
		Recline Stand 1180 x 874 x 2060 mm



Technical Specifications – Weights and Dimensions

### Weight with Touch Panel - 27"

Product Weight Unboxed	Without Stand 19.56 lbs. 8.87 kg	Adjustable Height Stand 25.40 lbs. 11.52 kg	Recline Stand 23.26 lbs. 10.55 Kg
Shipping Weight Boxed	Without Stand 25.46 lbs. 11.55 kg	Adjustable Height Stand 31.31 lbs. 14.2 kg	Recline Stand 29.17 lbs. 13.23 kg
Shipping Weight Pallet (18 units)	Without Stand 496.98 lbs. 225.9 kg	Adjustable Height Stand 601.92 lbs. 273.6 kg	Recline Stand 563.5 lbs. 256.14 kg

### Weight without Touch Panel - 27"

Product Weight Unboxed	Without Stand 17.79 lbs. 8.07 kg	Adjustable Height Stand 23.63 lbs. 10.72 kg	Recline Stand 21.50 lbs. 9.75 Kg
Shipping Weight Boxed	Without Stand 23.70 lbs. 10.75 kg	Adjustable Height Stand 29.54 lbs. 13.4 kg	Recline Stand 27.40 lbs. 12.43 kg
Shipping Weight Pallet (18 units)	Without Stand 465.3 lbs. 211.5 kg	Adjustable Height Stand 570.24 lbs. 259.2 kg	Recline Stand 531.83 lbs. 241.74 kg

### Dimensions (W x D x H) - 27"

 613.6 x 405.57 x 58.7 mm	Stand (-5 ~ 20) degrees	Recline Stand Stand (30 ~ 60) degrees 613.6 x 420.71 x 210.68 mm
613.6 x 405.57 x 59.07 mm	Stand (-5 ~ 20) degrees	Recline Stand Stand (30 ~ 60) degrees 613.6 x 420.71 x 211.05 mm

### Shipping Dimensions - 27"

 742 x 237 x 640 mm	in a just the transfer	Recline Stand 742 x 237 x 640 mm
	,	Recline Stand 1180 x 958 x 2076 mm



Technical Specifications – Miscellaneous Features

#### 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.
- Intel® Wired for Management support; industry wide initiative to make Intel® architecture based PCs, servers and mobile computers more inherently manageable out-of-the-box and over the network
- Dual State Power Button; acts as both an on/off button and a suspend-to-sleep button

### **Serviceability Features**

- Dual colored power LED on front of computer to indicate either normal or fault condition
- Diagnostic LED Explanation Table:
  - Power LED will blink red 2 to 5 times, then blink white 2 or more times, then repeat (with beep tones for each blink initially):
    - 2 red + 2 white User must provide file for BIOS recovery (USB storage typically)
    - 2 red + 3 white User must enter a key sequence to proceed with recovery by policy
    - 2 red + 4 white BIOS recovery is in progress
    - 3 red + 2 white Memory could not be initialized
    - 3 red + 3 white Graphics adaptor could not be found
    - 3 red + 4 white Power supply failure / not connected
    - 3 red + 5 white Processor not installed
    - 3 red + 6 white Current processor does not support an enabled feature
    - 4 red + 2 white Processor has exceeded its temperature threshold / system thermal shutdown
    - 4 red + 3 white System internal temperature has exceeded its threshold
    - 5 red + 2 white System controller firmware is not valid
    - 5 red + 3 white System controller detected BIOS is not executing
    - 5 red + 4 white BIOS could not complete initialization / PCA failure
    - 5 red + 5 white System controller rebooted the system after a health or recovery timer triggered
- 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 Holder for easy replacement
- Flash Recovery with Video Configuration Record Software
- Aux Power LED on System PCA
- Processor ZIF Socket for easy Upgrade
- Over-Temp Warning on Screen (Requires IM Agents)
- DIMM Connectors for easy Upgrade
- Clear CMOS Button
- NIC LEDs (integrated) (Green & Amber)
- Dual Color Power and HD LED To Indicate Normal Operations and Fault Conditions
- Color coordinated cables and connectors
- Tool-less Hood Removal
- Front power switch
- · System memory can be upgraded without removing the system board or any internal components
- Tool-less Hard Drive, CD & Diskette Removal (For MT, SFF, and DM only)
- Green Pull Tabs, and Quick Release Latches for easy Identification



Technical Specifications – Miscellaneous Features

Additional Features	Description
Tower Orientation	Product can be oriented as either a desktop (horizontal) or a tower (vertical) for MT, SFF, and DM only. SFF/DM requires optional stand.
Drive Lock	Implementation of the industry standard ATA Security feature set. When enabled, it prevents software access to user data on the drive until one or two user-defined passwords are provided.
Boot Sectors Protection	MBR and GPT sectors of the hard drive are critical to booting the operating system. By saving the MBR or GPT data (depending on the how the OS was installed), the BIOS will be able to monitor for changes and allow the user to override them with the backup copy at boot-up.
Drive Protection System	DPS Access through F10 Setup during Boot (for SATA hard drive only)
	A diagnostic hard drive self- test. It scans critical physical components and every sector of the hard drive for physical faults and then reports any faults to the user
	Running independently of the operating system, it can be accessed through a Windows-based diagnostics utility or through the computer's setup procedure. It produces an evaluation on whether the hard drive is the source of the problem and needs to be replaced
	The system expands on the Self-Monitoring, Analysis, and Reporting Technology (SMART), a continuously running systems diagnostic that alerts the user to certain types of failures
SMART Technology (Self-Monitoring, Analysis and Reporting Technology)	Allows hard drives to monitor their own health and to raise flags if imminent failures were predicted
SMART I - Drive Failure Prediction	Predicts failures before they occur. Tracks fault prediction and failure indication parameters such as re-allocated sector count, spin retry count, calibration retry count
SMART II - Off-Line Data Collection	By avoiding actual hard drive failures, SMART hard drives act as "insurance" against unplanned user downtime and potential data loss from hard drive failure
SMART III - Off-Line Read Scanning with Defect Reallocation	IOEDC: I/O Error Detection Circuitry
SMART IV - End-to-End CRC for hard drives	Detects errors in Read/Write buffers on HDD cache RAM



Technical Specifications – After Market Options

### **AFTER MARKET OPTIONS**

Graphics Solutions	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>	<u>Part Number</u>
AMD® Radeon™ RX 550X 4GB Display Port Card		Х			5LH79AA
AMD® Radeon™ R7 430 2GB 2 Display Port Card		X	X		5JW82AA
AMD® Radeon™ R7 430 2GB DP+VGA Card		Х	Х		5JW81AA

Desktop Mini Accessories	<u>DM</u>	<u>SFF</u>	MT	<u>AiO</u>	Part Number
HP Desktop Mini Port Cover v3	<u><b>X</b></u> (95W and discrete GPU skus not supported)				13L69AA
HP Desktop Mini 2.5" SATA Drive Bay kit v2	<u>X</u> (95W and discrete GPU skus not supported)				13L70AA
HP Desktop Mini 65W Power Supply Kit	<u>X</u>				L2X04AA
HP Desktop Mini 90W Power Supply Kit	<u>X</u>				L4R65AA
HP Desktop Mini LockBox V2	<u>X</u> (95W and discrete GPU skus not supported)				3EJ57AA
HP Desktop Mini DVD-Writer ODD Expansion Module	W (Fish an area)				K9Q83AA
HP Desktop Mini I/O Expansion Module	X (Either one)				K9Q84AA
HP Desktop Mini Security/Dual VESA Sleeve v3	<u>X</u> (95W and discrete GPU skus not supported)				13L67AA
HP Desktop Mini Security/Dual VESA Sleeve v3 with Power Supply Holder	<u>X</u> (95W and discrete GPU skus not supported)				13L68AA
HP B250 PC Mounting Bracket	<u>X</u>				<u>8RA46AA</u>
HP B300 PC Mounting Bracket	<u>X</u>				2DW53AA
HP B300 PC Mounting Bracket with Power Supply Holder	X (95W and discrete GPU skus not supported)				7DB37AA
HP B500 PC Mounting Bracket	<u>X</u>				<u>2DW52AA</u>
HP Desktop Mini Vertical Chassis Stand	<u>X</u>				<u>G1K23AA</u>
HP DM Power Supply Holder Kit v2	<u>X</u> (95W and discrete GPU skus not supported)				<u>7DB38AA</u>
HP Quick Release Bracket 2	X			<u>X</u> (required pre- configured VESA adapter	6KD15AA
HP Single Monitor Arm	<u>X</u>			<u>X</u>	<u>BT861AA</u>



### Technical Specifications – After Market Options

Data Storage Drives	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>	<u>Part Number</u>
HP PCIe NVME TLC 256GB SSD M.2 Drive	X	X	X	X	1CA51AA
HP PCIe NVME TLC 512GB SSD M.2 Drive	X	X	X	X	X8U75AA
HP 500GB 7200PRM SATA 3.5" Hard Drive		X	X		QK554AA
HP 1TB 7200rpm SATA 3.5" Hard Drive		X	X		QK555AA
HP 9.5mm Tower DVD-Writer		X	X		1CA52AA

Input Devices	<u>DM</u>	<u>SFF</u>	TWR	<u>AiO</u>	<u>Part</u> <u>Number</u>
HP Desktop Wired 320K Keyboard	X	X	Х	X	9SR37AA
HP Desktop Wired 320M Mouse	X	X	Х	X	9VA80AA
HP Desktop Wired 320MK Mouse and Keyboard	X	X	Х	X	9SR36AA
HP USB Antimicrobial Business Slim Keyboard and Mouse	X	X	Х	X	Z9H50AA
HP USB Business Slim CCID SmartCard Keyboard	X	X	Х	X	Z9H48AA
HP USB Keyboard	X	Х	Х	X	QY776AA
HP USB Keyboard and Mouse Healthcare Edition	X	X	Х	X	1VD81AA
HP USB Premium Keyboard	X	X	Х	X	Z9N40AA
HP USB PS/2 Washable Keyboard & Mouse	X	X	Х	X	BU207AA
HP Wireless Business Slim Keyboard and Mouse	X	X	X	X	N3R88AA
HP Wireless Premium Keyboard	X	X	Х	X	Z9N41AA
HP PS/2 Business Slim Keyboard		X	Х		N3R86AA
HP USB Fingerprint Mouse	X	Х	X	X	4TS44AA
HP USB Premium Mouse	X	X	X	X	1JR32AA
HP PS/2 Mouse		X	Х		QY775AA
HP Wireless Premium Mouse	X	X	X	X	1JR31AA
HP USB 1000dpi Laser Mouse	X	X	X	X	QY778AA
HP USB Optical Mouse	X	Х	Х	X	QY777AA
HP USB Hardened Mouse <sup>1</sup>	Х	Х	Х	Х	P1N77AA

### 1. Not available in all regions

System Memory	<u>DM</u>	<u>SFF</u>	TWR	<u>AiO</u>	<u>Part</u> <u>Number</u>
HP 32GB DDR4-2666 DIMM		Х	X		1C918AA
HP 32GB DDR4-2666 SODIMM	X			X	1C919AA
HP 4GB DDR4-3200 UDIMM		Х	X		13L78AA
HP 8GB DDR4-3200 UDIMM		Х	Х		13L76AA
HP 16GB DDR4-3200 UDIMM		Х	X		13L74AA
HP 32GB DDR4-3200 UDIMM		Х	Х		13L72AA
HP 4GB DDR4-3200 SODIMM	X			X	13L79AA
HP 8GB DDR4-3200 SODIMM	X			X	13L77AA
HP 16GB DDR4-3200 SODIMM	X			X	13L75AA



Technical Specifications – After Market Options

HP 32GB DDR4-3200 SODIMM	Х			Х	13L73AA
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Multimedia Devices	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>	<u>Part Number</u>
HP Business Headset v2	X	X	Х	X	T4E61AA
HP S101 Speaker Bar	X	X	Х		5UU40AA
HP UC Speaker Phone v2	X	X	Х		4VW02AA

Security Devices	<u>DM</u>	SFF	TWR	<u>AiO</u>	<u>Part</u> <u>Number</u>
HP Business PC Security Lock v3 Kit		Х	Х		3XJ17AA
HP Dual Head Keyed Cable Lock		Х	X		T1A64AA
HP Keyed Cable Lock 10mm	Х	Х	Х	Х	T1A62AA
HP Master Keyed Cable Lock 10mm	Х	Х	Х	X	T1A63AA
HP Sure Key Cable lock	X				6UW42AA

Stands and Accessories	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>	<u>Part Number</u>
HP EliteOne 800 G6 23.8" Height Adjustable Stand				х	13L61AA
HP EliteOne 800 G6 23.8" Recline Stand				X	13L62AA
HP EliteOne 800 G6 27" Height Adjustable Stand				х	13L63AA
HP EliteOne 800 G6 27" Recline Stand				X	13L64AA

I/O Devices	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>	<u>Part Number</u>
HP DisplayPort Port Flex IO v2	X	Х	X		13L54AA
HP HDMI Port Flex IO v2	X	X	X		13L55AA
HP Type-C <sup>®</sup> USB 3.1 Gen2 Port Flex IO v2	X	Х	X		<u>13L59AA</u>
HP Type-C <sup>®</sup> USB 3.1 Gen2 Port with PD Flex IO v2	X (Not Available on 95W and discrete GPU SKUs)				<u>13L60AA</u>
HP USB 3.1 Gen1 x2 Module Flex IO v2	(Not Available on 95W and discrete GPU SKUs)	х	х		13L58AA
HP VGA Port Flex IO v2	X	X	X		<u>13L53AA</u>
HP Serial Port Flex IO v2	<b>X</b> (Not Available on 95W and discrete GPU SKUs)	х	х		<u>13L56AA</u>

HP Serial Port Flex IO 2 v2	X (Not Available on 95W and discrete GPU SKUs)			<u>13L57AA</u>
HP Internal Serial Port (in rear wall)		X	X	3TK82AA
HP PCIe x1 Parallel Port Card		Х	X	N1M40AA



Technical Specifications – After Market Options

HP Serial/PS/2 Adapter Kit (in PCIe slot)		Х	X	1VD82AA
HP USB to Serial Port Adapter	X	X	X	J7B60AA
HP USB-C to Display Port Adapter	X	Х	X	N9K78AA
HP Single Mini Display Port Adapter to Display Port Adapter	<b>X</b> (Only Available with GPU SKUs)			2MY05AA

**NOTE:** For more detail on HP I/O Devices please refer to the HP FLEX IO Option Cards QuickSpecs. URL is: http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c06042607

Communication Devices	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>	<u>Part Number</u>
Intel® Ethernet I210-T1 GbE NIC		Х	Х		<u>E0X95AA</u>

Intel® Optane Memory	<u>DM</u>	<u>SFF</u>	<u>TWR</u>	<u>AiO</u>	<u>Part Number</u>
512GB Intel® Optane™ Memory H10 with SSD	X	X	Х	х	6VF55AA



### Change Log

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Date	Version History	Action	Description of Change
July 15, 2020	From v1 to v2	Addition	Supported versions section
July 22, 2020	From v2 to v3	Addition	NVIDIA® GeForce® RTX 2070 Super 8GB GDDR6
August, 2020	From v3 to v4	Addition	DVD-R DL - Up to 6X, DVD+R DL - Up to 6X, DVD-R SL/DL Up to 8X and DVD+R SL/DL Up to 8X on the read/write speed on the blue ray write drive specs on Storage section.  Specs for DM environmental section completed.  DM rear call outs corrected.
October 6, 2020	From v4 to v5	Correction	ALL-IN-ONE WEIGHTS AND DIMENSIONS tables information.
October 7, 2020	From v5 to v6	Addition	Environmental specs for SFF
October 8, 2020	From v6 to v7	Update	Environmental specs for AiO 24
October 8, 2020	From v6 to v7	Update	Environmental specs for AiO 24
October 27, 2020	From v8 to v9	Correction	Processors footnotes and Turbo boost specs corrected
November 13, 2020	From v9 to v10	Addition	Specification at External Power Supplies row in POWER section
November 20, 2020	From v10 to v11	Correction	Rear components and rear ports call outs section and NVIDIA® GeForce® RTX 2070 Super 8GB GDDR6 specs corrected
November 26, 2020	From v11 to v12	Addition	Environmental specs for TWR
January 6, 2021	From v12 to v13	Update/add	Footnotes added to "At a glance" section and packaging materials data in 23.8-in All-in-One Environmental info updated
January 20, 2021	From v13 to v14	Correction	Intel® i210 10/100/1000 NIC in N&C section corrected
January 21, 2021	From v14 to V15	Removal	HP Thunderbolt 3.0 (4CX35AA) from AMO section
January 26, 2021	From v15 to v16	Correction	System volume for TWR and SFF in Weights and dimensions section
February 17, 2021	From v16 to v17	Correction	"Anti-glare" removed from 27.0" LCD (2560 x 1440) Touch in DISPLAY PANEL SPECIFICATIONS
February 24, 2021	From v17 to v18	Update	At a Glance section Raid bullet and Fiber NIC specification added
March 22, 2021	From v18 to v19	Update	Description added to HP Quick Release Bracket 2 in AMO
April 15, 2021	From v19 to v20	Update/ Correction	Disclaimer for Fiber NIC flex port card added in DM rear call outs/Typo in Power Supply section
April 20, 2021	From v20 to v21	Update	Intel® I219-LM 1 table
May 4, 2021	From v21 to v22	Addition	HP Smart Support and footnote added to software section
May 12, 2021	From v22 to v23	Removal	DM from HP Reverb VR Headset bullet in At a Glance section
June 9, 2021	From v23 to v24	Update	Audio/multimedia settings and call outs except for AIO´s
July 2, 2021	From v24 to v25	Addition	10 new processors
July 6, 2021	From v25 to v26	Update	256GB Intel® PCIe® NVMe™ QLC + 16GB Intel® Optane from 32GB
August 6, 2021	From v26 to v27	Update	System memory in AMO updated
August 19, 2021	From v27 to v28	Update	Environmental, Weights and dimensions, Power, Miscellaneous features, display specifications and Storage updated.

