## HP Z2 Tower G4 Workstation

#### HP's most powerful entry workstation

Trải nghiệm sức mạnh cấp máy chủ trong một máy trạm để bàn với khả năng mở rộng ấn tượng. Tự tin giải quyết các khối lượng công việc phức tạp như BIM và kết xuất với đồ họa Ultra 3D và bộ xử lý Intel® Core ™ hoặc Intel® Xeon® mới nhất.





## HP recommends Windows 10 Pro.

#### Hiệu suất năng cao

 Z2 được trang bị để xử lý các dự án 3D đòi hỏi khắt khe với sức mạnh đồ họa chuyên nghiệp được chứng nhận cao cấp. Và với tốc độ xung nhịp cao, bạn sẽ có được hiệu suất hoàn hảo, ngay cả với khối lượng công việc nặng nhất của bạn.

#### Được xây dựng để mở rộng

- Máy trạm có thể mở rộng nhất của HP được thi ế t k ế để phát triển cùng với bạn. Cho dù bạn cân trao đổi đô họa, tăng sức mạnh CPU hoặc thêm thẻ PCIe chuyên dụng, Z2 Tower có thể đáp ứng các yêu câu khối lượng công việc thay đổi của bạn. Máy trạm an toàn và dễ quản lý nhất của HP
- nhận được sự bào vệ mạnh mẽ khỏi các mối đe dọa phần mềm độc hại bằng các giải pháp bảo mật tự phục hồi, được thi hành bằng phần cứng như HP Sure StartGen4 1 bảo vệ chống lại các cuộc tấn công BIOS. Ngoài ra, dễ dàng quản lý nhiều thiết bị với Bộ tích hợp khả năng quản lý HP Gen2 2..

#### Featuring

- Support your unique user needs with a choice of Windows 10 Pro 64 or Linux® operating systems.<sup>3</sup>
- Get powerful performance on single-threaded applications with the latest generation Intel<sup>®</sup> Xeon<sup>®</sup> E processors with up to 6 cores.<sup>4</sup>
- Maximize your 3D workflow with support for multiple NVIDIA® and AMD professional graphics from Entry to Ultra 3D.
- With dual M.2 storage slots you can install the fasted pro-grade storage hardware to unlock your storage-bound apps without sacrificing standard PCIe slots.
- The stunning new design features front and rear ledges, so you can easily move your system from location to location.
- Save space within your office layout with a 14% smaller system than the previous generation.
- Protect the firmware that antivirus can't reach! The hardware-enforced self-healing protection offered by HP Sure Start Gen4
  automatically recovers the BIOS from malware, rootkits, or corruption.
- Get multiple high-speed network connections including a second LAN option without needing to purchase and install an additional network interface card (NIC).
- Configure a 250W power supply for cost savings or optimize your configuration with a 500W power supply.
- With optional self-encryption drives, you have confidence knowing that if your storage device falls into the wrong hands, your valuable IP cannot be accessed.

# HP Z2 Tower G4 Workstation Specifications Table







Operating System	Windows 10 Pro for Workstations 64 - HP recommends Windows 10 Pro <sup>1</sup> Windows 10 Home 64 <sup>1</sup> Windows 10 Pro (National Academic only) <sup>1,20</sup>
Processor Family	Intel® Xeon® processor (E-2176G, E-2174G, E-2146G, E-2144G, E-2126G, E-2124G, E-2104G); Intel® Pentium® Gold processor; 8th Generation Intel® Core™ i7+ processor; 8th Generation Intel® Core™ i5+ processor; 8th Generation Intel® Core™ i5 processor; 8th Generation Intel® Core™ i5 processor; 8th Generation Intel® Core™ i5 processor; 8th Generation Intel® Core™ i5+ proc
Processors2,3,4,5,6,21	Intel® Xeon® E-2124G (3.4 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores)

Chipset	Intel® C246
Memory	8 GB DDR4 non-ECC SDRAM <sup>7,18</sup>
Memory Slots	4 DIMM
Drive Controllers	Integrated SATA (4 ports 6 Gb/s) with integrated RAID 0, 1, for PCIe SSDs supported. Requires identical hard drives (speeds, capacity, interface).
Internal Storage	1 TB 7200 rpm SATA <sup>8</sup>

Optical Storage	HP Slim Blu-ray Writer; HP Slim DVD-ROM; HP Slim DVD-Writer <sup>9,18,19</sup>
Drive Bays (Internal)	Two 3.5"; Two M.2 NVME 2280 SSD
Drive Bays (External)	Two 5.25"
Available Graphics	NON
Expansion Slots	2 M.2 PCle 3 x4; 1 PCle Gen 3 x16; 2 PCle 3 x1 (x4 open ended connector); 2 PCle 3 x4 (x16 connector)
Ports and Connectors	Front: 1 headphone/microphone combo; 1 USB 2.0 (charging); 2 USB 3.0; 1 USB 3.1 Gen 2 Type-C <sup>mg</sup> 1 audio-in; 1 audio-out; 1 DVI-I single link; 1 RJ-45; 2 DisplayPort™ 1.2; 2 USB 2.0; 4 USB 3.0; 14 Internal: 1 USB 3.0; 2 USB 2.0 1 USB 3.0 and 2 USB 2.0 ports available as 2 separate 2 x 10 (3.0 x 1, 2.0 x 1) and 2 x 5 (2.0 x 2) header. Supports one HP Internal USB 2.0 Port Kit and one USB 3.0 media card reader.
Communications	LAN: Integrated Intel® I219-LM PCIe® GbE;
Power	500 W external power adapter, up to 92% efficiency, active PFC; 250 W external power adapter, up to 90% efficiency, active PFC
Input Device	HP PS/2 Business Slim Keyboard; HP USB Business Slim Keyboard; HP Wireless Business Slim Keyboard; USB Smart Card (CCID) keyboard <sup>9</sup> 3D connexion CADMouse; HP SpaceMouse Pro USB 3D; HP USB 1000 dpi Laser Mouse; HP USB Hardened Mouse; HP USB Optical 3-Button Mouse; HP USB Optical Mouse <sup>9</sup>
Security	HP Business PC Security Lock Kit; HP Keyed Cable Lock Kit; HP Solenoid Hood Lock and Sensor; HP UltraSlim Cable Lock Kit; HP Client Security Suite Gen 4; HP Sure Start Gen 4; HP Sure Run; HP Sure Click; HP BIOSphere Gen49.22.24.25.30.31
Software	Buy Office; CyberLink Power2Go; CyberLink PowerDVD; HP Client Security Software; HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Remote Graphics Software (RGS) 7.1; PDF Complete - Corporate Edition; HP Sure Recover; HP Manageability Integration Kit Gen2 <sup>15,16,23,32</sup>
Dimensions	35.6 x 16.9 x 43.5 cm Standard tower orientation.
Weight	Starting at 7 kg Exact weight depends on configuration.
Energy Efficiency Compliance	ENERGY STAR® certified and EPEAT® registered configurations available 17
Environmental Certification	Low halogen <sup>33</sup>
Compatible Displays	All HP Z Displays and HP DreamColor Displays are supported. For more information see www.hp.com/go/zdisplays
Warranty	3 year (3-3-3) limited warranty and service offering includes 3 years of parts, labor and on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply.

## **HP Z2 Tower G4 Workstation**

## Accessories and services (not included)

16GB (1x16GB) DDR4-2666 ECC Reg RAM

Boost the capabilities of your HP Workstation and improve system performance and application responsiveness with low-power, high-speed DDR4 memory from HP.

Product number: 1XD85AA



3Dconnexion CadMouse

Simplify scroll, click, and zoom functions and comfortably drive your CAD projects with the 3Dconnexion CADMouse.

Product number: M5C35AA



HP Z38c 37.5-inch Curved Display

Completely immerse yourself in the expansive elegance of the HP Z38c Curved Display. Form meets function with crisp, panoramic views so you can stay focused on your work.

Product number: Z4W65A4



HP Wireless Premium Keyboard

Boost your productivity and work comfortably with the elegant, redesigned, anodized aluminum-trimmed HP USB

Premium Keyboard. Product number: Z9N41AA

HP 5 year Next Business Day Onsite Hardware Support for Workstations

Receive 5 years of next business day onsite HW Support from an HP-qualified technician for your computing device, if the issue cannot be solved remotely.

Product number: U7944E



## HP Z2 Tower G4 Workstation

#### Messaging Footnotes:

- <sup>1</sup> HP Sure Start Gen4 is available on HP Elite and HP Workstation products equipped with 8th generation Intel® or AMD processors
- HP Manageability Integration Kit Gen2 can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html
- <sup>3</sup> 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
- <sup>4</sup> Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.
- <sup>5</sup> HP Sure Start Gen4 is available on HP Elite and HP Workstation products equipped with 8th generation Intel® or AMD processors
- <sup>6</sup> Sold separately or as an optional feature.
- <sup>7</sup> Sold separately or as an optional feature

#### **Technical Specifications Footnotes:**

- 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
- <sup>2</sup> Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.
- <sup>3</sup> 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® or Windows 7 drivers on http://www.support.hp.com
- <sup>4</sup> Intel<sup>®</sup> Optane™ memory system acceleration does not replace or increase the DRAM in your system
- SVPro. Some functionality of this 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 future "virtual appliances" is yet to be determined.
- 6 Intel Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost for more information. 7 Only 2 DIMM configurations run at 2400 MHz and 4 DIMM configurations run at 2133 MHz.
- For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB of system disk (for Windows 10) is reserved for system recovery software.

  9 Optional or add-on feature

- To pludiation add-on reactive 10 HD content required to view HD images.

  10 Intel® HD graphics 630 is configurable as a standalone graphics option; Intel® HD graphics P630 only used when NVIDIA® Optimus™ Technology is enabled.

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  12 NVIDIA® Quadro® mobile professional graphics support up to four independent displays when using a HP ZBook Dock with Thunderbolt 3 (sold separately) or DP 1.2 hubs with MST.

  13 NVIDIA® Quadro® mobile professional graphics support up to four independent displays when using a HP ZBook Dock with Thunderbolt 3 (sold separately) or DP 1.2 hubs with MST.
- <sup>13</sup>Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. The specifications for the 802.11ac WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the workstation to communicate with other 802.11ac WLAN devices.
- 14 3 DisplayPort 1.2 in Performance model.
   15 HP Client Security requires Windows and Intel® or AMD 7th or 8th generation processors
- 16 HP Performance Advisor and HP Remote Graphics Software requires internet access.

  17 EPEAT® registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country. Search keyword generator on HP's 3rd party option store for solar generator accessories at www.hp.com/go/options
- 18 Duplication of copyrighted material is strictly prohibited. Actual speeds may vary. Double Layer media compatibility will widely vary with some home DVD players and DVD-ROM drives. Note that DVD-RAM cannot read or write to 2.6GB Single Sided/5.2 Double Sided-Version 1.0 Media.
- 19 With Blu-Ray, certain disc, digital connection, compatibility and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. In order for some Blu-ray titles to play, they may require a DVI or HDMI digital connection and your display may require HDCP support. HD-DVD movies cannot be played on this Desktop PC.
- <sup>20</sup> 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.
- <sup>21</sup> Intel® Optane™ available Fall 2018
- <sup>22</sup> HP BIOSphere Gen4 features may vary depending on the PC platform and configurations requires 8th Gen Intel<sup>®</sup> processors.
- <sup>23</sup> HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html
- <sup>24</sup> HP Client Security Suite Gen 4 requires Windows and Intel® or AMD 8th generation processors.

  <sup>25</sup> HP Sure Click is available on select HP platforms and supports Microsoft® Internet Explorer and Chromium™. Check http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW for all compatible platforms as they become available.

  30 HP Sure Start Gen4 is available on HP Elite and HP Workstation products equipped with 8th generation Intel® or AMD processors.

- 31 HP Sure Run is available on HP Elite products equipped with 8th generation Intel® or AMD processors.

  32 HP Sure Recover is available on HP Workstations with 8th generation Intel® or AMD processors and requires an open, wired network connection. Not available on platforms with multiple internal storage drives, Intel® Optane™. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.
- 33 External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

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