HP Z2 Tower G4 Workstation

Work faster with our most powerful entry workstation

Experience server-grade power in a desktop with impressive expandability. Cut through complex BIM, rendering and visualization projects with ultra 3D pro graphics and the latest Intel® Core™ or Xeon® processors.

HP recommends Windows 10 Pro.

Take next-gen processing to record speeds

- Crush demanding multi-threaded workflows with pro graphics and 9th gen 8-core Intel processors. We redesigned our proprietary motherboard to unlock an extra 8% boost, for an epic 41% total performance increase over last gen[1].

Built to expand

- Need to swap graphics cards? Increase CPU power? Add specialized PCIe cards? Go for it. Our most expandable entry workstation is an investment that will last for years.

Safeguard your data. Protect your privacy.

- Advanced security features come standard on every Z2 Tower. System safeguards like HP Client Security Suite Gen3[2] and HP Sure Start Gen4[3] - the industry's first self-healing BIOS - mean your device is locked down tight, so your data and identity are too.

- Support your unique user needs with a choice of Windows 10 Pro 64 or Linux® operating systems.[4]
- Get powerful performance on single-threaded applications with the latest generation Intel® Xeon® E processors with up to 8 cores.[5]
- 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 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.
- 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.[6]
- 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.[6]

HP Z2 Tower G4 Workstation Specifications Table

Available Operating Systems	Windows 10 Pro for Workstations 64 - HP recommends Windows 10 Pro[1] Windows 10 Pro (National Academic only)[1,20]
Processor family[2,3]	Intel® Xeon® processor (E-2176G, E-2174G, E-2146G, E-2144G, E-2136, E-2126G, E-2124G, E-2104G); Intel® Pentium® Gold processor; 9th Generation Intel® Core™ i9 processor; 9th Generation Intel® Core™ i7 processor; 9th Generation Intel® Core™ i5 processor; 9th Generation Intel® Core™ i3 processor; 8th Generation Intel® Core™ i7 processor; 8th Generation Intel® Core™ i5 processor; 8th Generation Intel® Core™ i3 processor
Available Processors[2,3,4,5,6,30]	Intel® Xeon® E-2286G (4.0 GHz base frequency, up to 4.9 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores), vPro™ Intel® Xeon® E-2278G (3.4 GHz base frequency, up to 5.0 GHz with Intel® Turbo Boost Technology, 16 MB cache, 8 cores), vPro™ Intel® Xeon® E-2276G (3.8 GHz base frequency, up to 4.9 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores), vPro™ Intel® Xeon® E-2274G (4.0 GHz base frequency, up to 4.9 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores), vPro™ Intel® Xeon® E-2244G (3.8 GHz base frequency, up to 4.8 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores), vPro™ Intel® Xeon® E-2236 (3.4 GHz base frequency, up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores), vPro™ Intel® Xeon® E-2226G (3.4 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores), vPro™ Intel® Xeon® E-2224G (3.4 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores), vPro™ Intel® Xeon® E-2176G vPro™ (3.7 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores) Intel® Xeon® E-2174G vPro™ (3.8 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Xeon® E-2144G vPro™ (3.6 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Xeon® E-2136 vPro™ (3.3 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores) Intel® Xeon® E-2126G vPro™ (3.3 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores) Intel® Xeon® E-2104G vPro™ with Intel® HD Graphics P630 (3.2 GHz, 8 MB cache, 4 cores) Intel® Pentium® Gold G5400 with Intel® HD Graphics 610 (3.7 GHz base frequency, 4 MB cache, 2 cores) Intel® Core™ i9-9900K with Intel® UHD Graphics 630 (3.6 GHz base frequency, up to 5.0 GHz with Intel® Turbo Boost Technology, 16 MB cache, 8 cores) Intel® Core™ i9-9900 with Intel® UHD Graphics 630 (3.1 GHz base frequency, up to 5.0 GHz with Intel® Turbo Boost Technology, 16 MB cache, 8 cores) Intel® Core™ i7-9700K with Intel® UHD Graphics 630 (3.6 GHz base frequency, up to 4.9 GHz with Intel® Turbo Boost Technology, 12 MB cache, 8 cores) Intel® Core™ i7-9700 with Intel® UHD Graphics 630 (3.0 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 12 MB cache, 8 cores) Intel® Core™ i7 8700 vPro™ with Intel® HD Graphics 630 (3.2 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores) Intel® Core™ i5-9600 with Intel® UHD Graphics 630 (3.1 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i5-9500 with Intel® UHD Graphics 630 (3.0 GHz base frequency, up to 4.4 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i5 8600 vPro™ with Intel® HD Graphics 630 (3.1 GHz base frequency, up to 4.3 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i5 8500 vPro™ with Intel® HD Graphics 630 (3 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i3-9100 with Intel® UHD Graphics 630 (3.6 GHz base frequency, up to 4.2 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Core™ i3-8100 with Intel® HD Graphics 630 (3.6 GHz, 6 MB cache, 4 cores)
Chipset	Intel® C246
Maximum memory	128 GB DDR4-2666 ECC SDRAM; 128 GB DDR4-2666 non-ECC SDRAM [7] Transfer rates up to 2666 MT/s.
Memory slots	4 DIMM
Internal storage	500 GB up to 6 TB 7200 rpm SATA[8] 500 GB SATA SED[8] 256 GB up to 2 TB SATA SSD[8] 280 GB up to 480 GB Intel® Optane™ SSD 905P[8,21] 256 GB up to 512 GB SATA SED SSD[8] 512 GB HP Z Turbo Drive G2 PCIe® SSD[8] 256 GB up to 1 TB HP Z Turbo Drive G2 PCIe® NVMe™ SSD[8,31]
Storage acceleration[38]	16 GB PCIe® NVMe™ Intel® Optane™ Memory for storage acceleration
Optical drive[9,18,19]	HP Slim Blu-ray Writer; HP Slim DVD-ROM; HP Slim DVD-Writer
Available Graphics	Integrated: Intel® UHD Graphics 630; Intel® UHD Graphics P630[10,11] Entry 3D: NVIDIA® Quadro® P400 (2 GB GDDR5 dedicated); NVIDIA® Quadro® P620 (2 GB GDDR5 dedicated) Mid-range 3D: AMD Radeon™ Pro WX 4100 Graphics (4 GB GDDR5 dedicated); AMD Radeon™ Pro WX 3100 Graphics (4 GB GDDR5 dedicated); NVIDIA® Quadro® P1000 (4 GB GDDR5 dedicated); NVIDIA® Quadro® P2000 (5 GB GDDR5 dedicated); NVIDIA® Quadro® P2200 (5 GB GDDR5X dedicated); AMD Radeon™ Pro WX 3200 Graphics (4 GB GDDR5 dedicated) High-end 3D: AMD Radeon™ Pro WX 7100 Graphics (8 GB GDDR5 dedicated); NVIDIA® Quadro® P4000 (8 GB GDDR5 dedicated); NVIDIA® Quadro® RTX 4000 (8 GB GDDR6 dedicated) Ultra High-end 3D: NVIDIA® Quadro® P5000 (16 GB GDDR5X dedicated); NVIDIA® Quadro® RTX 5000 (16 GB GDDR6 dedicated); NVIDIA® Quadro® RTX 6000 (24 GB GDDR6 dedicated)
Audio	Conexant CX20632-31Z, 1.5W internal mono speaker
Expansion slots	1 PCIe 3 x4 (x16 connector); 2 M.2 PCIe 3 x4; 1 PCIe Gen 3 x16; 2 PCIe 3 x1 (x4 open ended connector)
Ports and Connectors	Front: 1 headphone/microphone combo; 2 USB 3.0 (1 charging); 1 USB 3.1 Gen 2 Type-C™[9] Rear: 1 audio-in; 1 audio-out; 1 RJ-45; 2 DisplayPort™ 1.2; 2 USB 2.0; 4 USB 3.0 Internal: 1 USB 3.0; 2 USB 2.0 Optional: Flex I/O (1 USB 3.0 and 2 USB 2.0 ports available as 2 separate 2 x 6 (3.0 x 1, 2.0 x 1) and 1 x 6 (2.0 x 1) header. Supports one HP Internal USB 2.0 Port Kit and one USB 3.0 media card reader.)
Available Keyboards	HP PS/2 Business Slim Keyboard; HP USB Business Slim Keyboard; HP Wireless Business Slim Keyboard; USB Smart Card (CCID) keyboard[9]
Available Pointing Devices	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[9]
LAN[9] Network Interface[9]	Integrated Intel® I219-LM PCIe® GbE Intel® I350-T2 dual-port GbE NIC
Drive Bays	Two 5.25"; Two 3.5"; Two M.2 NVME 2280 SSD
Available Software[15,16,23,28]	Buy Office; CyberLink Power2Go; CyberLink PowerDVD; HP Client Security Software; HP Manageability Integration Kit Gen2; HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Remote Graphics Software (RGS) 7.1; HP Sure Recover; PDF Complete - Corporate Edition
Security management[9,22,24,25,26,27]	HP BIOSphere Gen4; HP Business PC Security Lock Kit; HP Client Security Suite Gen 4; HP Keyed Cable Lock Kit; HP Solenoid Hood Lock and Sensor; HP Sure Click; HP Sure Run; HP Sure Start Gen 4; HP UltraSlim Cable Lock Kit
Power	500 W internal power adapter, up to 90% efficiency, active PFC; 250 W internal power adapter, up to 92% efficiency, active PFC; 650 W internal power adapter, up to 90% efficiency, active PFC
Dimensions	14 x 6.7 x 17.1 in; 35.6 x 16.9 x 43.5 cm
Weight	Starting at 15.43 lb; Starting at 7 kg
Energy efficiency compliance[17]	ENERGY STAR® certified and EPEAT® 2019 registered where applicable. EPEAT® registration varies by country. See www.epeat.net for registration status by country.
Environmental specifications[29]	Low halogen
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported. For more information see www.hp.com/go/zdisplays
Warranty	Protected by HP global standard limited warranty of 3 years parts, labor and on-site service. Terms and conditions may vary by country. Certain restrictions and exclusions apply. 24/7 operation will not void the HP warranty.

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Accessories and services (not included)

HP Z24n G2 24-inch Display

Be a productive powerhouse with the sleek WUXGA HP Z24n G2 24-inch Display. This virtually seamless display is factory-tested for reliability and longevity with integrated color calibration, uninterrupted multi-screen[1] tiling, and expansive device connections, including USB-C™.
Product number: 1JS09A8

HP 6TB Enterprise SATA 7200 HDD

Expand your workstation storage with the HP 4 TB SATA 7200 HDD,[1] an excellent solution for high capacity applications.
Product number: 3DH90AA

HP 16GB (1x16GB) DDR4-2666 nECC 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: 3PL82AA

HP 4 year Next Business Day Onsite Hardware Support w/Defective Media Retention for Workstations

When hardware issues come up, the sooner you can get running again, the better. Have expertise at the ready with HP Hardware Next Business Day[1] Onsite Service with Defective Media Retention, and vastly improve your product uptime. With high-quality remote assistance or convenient onsite support available the next business day, help is there when you need it—so you can get back to work.
Product number: U1G56E (for 4 year platforms), U1G57E (for 5 year platforms)

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Messaging Footnotes

[1] 41% total performance increase based on Cinebench test (multi-threaded apps) comparing Intel® Core™ i9-9900K on newly designed motherboard to Intel® Core™ i7-8700K.
[2] Requires Windows and Intel® or AMD 7th or 8th generation processors.
[3] HP Sure Start Gen4 is available on HP Elite and HP Workstation products equipped with 8th generation Intel® or AMD processors.
[3] 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
[4] Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.
[5] Sold separately or as an optional feature.
[6] 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
[2] 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.
[3] 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
[4] Intel® Optane™ memory (cache) is sold separately. Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system and requires configuration with an Intel® Core™ i+ processor.
[5] vPro. 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.
[8] 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
[10] HD content required to view HD images.
[11] Intel® HD graphics 630 is configurable as a standalone graphics option; Intel® HD graphics P630 only used when NVIDIA® Optimus™ Technology is enabled.
[13] 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] Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit www.epeat.net for more information.
[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.
[20] 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.
[22] HP BIOSphere Gen4 features may vary depending on the PC platform and configurations requires 8th Gen Intel® processors.
[23] HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html
[24] HP Client Security Suite Gen 4 requires Windows and Intel® or AMD 8th generation processors.
[25] 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.
[26] HP Sure Start Gen4 is available on HP Workstation products equipped with Intel® 8th generation processors.
[27] HP Sure Run is available on HP Workstation products equipped with 8th generation Intel® or AMD® processors.
[28] 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.
[29] External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
[30] Configurations with the Xeon E-2124G, E-2126G, E-2136, E-2144G, 2174G and E-2176G offered on the Mini Performance model only.
[31] 1TB, 4TB and 6TB Enterprise Class 3.5" HDDs.
[38] Intel® Optane™ memory is sold separately. Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system. Available for HP commercial desktops and notebooks and for select HP workstations (HP Z240 Tower/SFF, Z2 Mini, ZBook Studio, 15 and 17 G5) and requires a SATA HDD, 7th Gen or higher Intel® Core™ processor or Intel® Xeon® processor E3-1200 V6 product family or higher, BIOS version with Intel® Optane™ supported, Windows 10 version 1703 or higher, M.2 type 2280-S1-B-M connector on a PCH Remapped PCIe Controller and Lanes in a x2 or x4 configuration with B-M keys that meet NVMe™ Spec 1.1, and an Intel® Rapid Storage Technology (Intel® RST) 15.5 driver.

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