ProductSheet

HP Z2 Tower G9 Workstation (B59YGUA)

Pro-power. Today and tomorrow

Experience a whole new level of performance for your professional workflow. The Z2 Tower is engineered to seamlessly run multi-threaded apps for fast rendering, simulation, and now real-time ray tracing. And when your demands change, you have impressive expandability to upgrade.



Your new benchmark for entry workstation power
Designed for zero throttling so you can render, simulate, and real-time ray trace without overheating or lags.

Built to expand. Power to grow
With room to expand and tool-less access, you can easily upgrade and add components as your needs evolve.

ISV Certified
Work with confidence knowing your PC is certified with leading software applications to ensure peak performance[3]

Featuring

Windows 11
Work anywhere without compromising on performance or security with Windows 11 powered by HP's collaboration and connectivity technology.

Intel® Core™ i9 processor
Get high-end performance for intensive tasks like rendering and video editing with the Intel® Core™ i9 processor. [4]

Smaller, Functional Design
The stunning new design features front and rear ledges, so you can easily move your system from location to location.

Tool-less Access
Evolve your work. Evolve your rig. With a tool-less sliding access cover, you can easily get into the the interior, and customize your Z to fit your needs.

Thermal Management
Innovatively designed to keep hardware components cool and quiet no matter how hard you push it. Have confidence to run your system at max load 24/7.

Specifications

Operating system	Windows 11 Pro[1]
Processor family	Intel® Core™ i9 14th generation processor
Processor	Intel® Core™ i9-14900 (up to 5.4 GHz Max Turbo frequency, 36 MB L3 cache, 24 cores, 32 threads)[6,7]
Chipset	Intel® W680
Memory	32 GB DDR5-4800 MT/s (1 x 32 GB)
Memory Slots	4 DIMM
Internal Storage	1 TB HP Z Turbo Drive PCIe® NVMe™ TLC SSD
Hard drive (2nd)	1 TB HP Z Turbo Drive PCIe® NVMe™ TLC SSD
Internal drive bays	One 2.5" HDD; Two 3.5" HDD; Three M.2 NVME 2280 SSD
External drive bays	One slim ODD; One 5.25" ODD
Graphics	Discrete
Graphics (discrete)	NVIDIA RTX™ 4500 Ada Generation (24 GB GDDR6 dedicated)
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics 770
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported. For more information see www.hp.com/go/zdisplays
Audio	Realtek ALC3205-VA2-CG, 2.0W internal mono speaker
Minimum dimensions (W x D x H)	35.6 x 16.9 x 38.5 cm *(Standard tower orientation.)*
Minimum dimensions (W x D x H)	14 x 6.7 x 15.2 in *(Standard tower orientation.)*
Weight	Starting at 6.2 kg *(Exact weight depends on configuration.)*
Weight	Starting at 13.7 lb *(Exact weight depends on configuration.)*
Keyboard	HP Wired Desktop 320K Keyboard
Pointing device	HP Wired 320M Mouse
Ports	4 SuperSpeed USB Type-A 10Gbps signaling rate (1 charging); 1 universal audio jack
Expansion slots	1 PCIe 3 x4 (x16 connector); 1 PCIe 3 x4 (x4 connector); 1 PCIe 3 x1 (x4 connector); 1 PCIe 5 x16 (x16 connector); 1 M.2 2230 PCIe 3 X1 for WLAN *(1 M.2 2230 slot for WLAN and 3 M.2 2280 slots for storage)*
Ports	1 audio-in; 1 audio-out; 1 RJ-45; 2 DisplayPort™ 1.4; 2 SuperSpeed USB Type-A 10Gbps signaling rate; 1 SuperSpeed USB Type-A 5Gbps signaling rate; 3 USB Type-A 480Mbps signaling rate
Package dimensions (W x D x H)	51.8 x 29.5 x 49 cm
Power	700 W 92% efficient, wide-ranging, active PFC
Management features	HP Driver Packs; HP Management Integration Kit for Microsoft System Center Configuration Management Gen4; HP System Software Manager (download); HP BIOS Configuration Utility (download)[18]
Sustainable impact specifications	Ocean-bound plastic in speaker enclosure; 45% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; 80 Plus® Gold power supplies available; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; Ocean-bound plastic in speaker enclosure and system fan; Contains recycled metal
Security management	HP Secure Erase; HP Sure Click; HP BIOSphere Gen6; HP Sure Admin; Hood Sensor Optional Kit; HP Client Security Manager Gen6; HP Sure Start Gen7; HP Sure Recover Gen4; HP Sure Sense Gen2; HP Sure Run Gen5[19,20,21,22,23,24,25,26,33]
Software included	HP PC Hardware Diagnostics UEFI; HP Support Assistant; HP PC Hardware Diagnostics Windows; HP Image Assistant; HP Manageability Integration Kit; Performance Advisor 3.0[15,16,17]
UPC number	198990073637

Top Recommended Displays, Accessories and Services

Speakerphones	
Poly Sync 20+ USB-C Speakerphone	772D0AA
Poly Sync 20 USB-C Speakerphone	7F0J7AA
Poly Sync 10 USB-A USB-C Speakerphone	772C3AA
Wireless Headset	
Poly Voyager Focus 2 USB-C-C Headset +USB-C/A Adapter	9T9J3AA
Wired Headset	
Poly Blackwire 8225 Stereo USB-C Headset +USB-C/A Adapter	8X223AA
Poly Blackwire 5220 Stereo USB-C Headset +3.5mm Plug +USB-C/A Adapter	8X231AA
Storage	
HP Z Turbo Drive 2TB TLC Z8 G4 SSD Kit	201F8AA
Internal ports/Modules/Controllers	
NVIDIA Mellanox ConnectX-6 LX Dual Port 25GbE SFP28 NIC	436M8AA
Wireless Mice	
HP 715 Rechargeable Multi-Device Mouse	6E6F0AA
Cables/Cable Adapters/Dongles	
HP DisplayPort To VGA Adapter	AS615AA

Messaging Footnotes

[3] Third party software sold separately.

[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.

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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.

[6] 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.

[7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost/ for more information.

[16] HP Performance Advisor Software - HP Performance Advisor is ready and waiting to help you get the most out of your HP Workstation from day one—and every day after. Learn more or download at: https://www8.hp.com/us/en/workstations/performance-advisor.html

[17] HP Support Assistant requires Windows and Internet access.

[18] HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html

[19] HP Client Security Manager Gen7 requires Windows and is available on the select HP PCs.

[20] HP BIOSphere Gen6 features may vary depending on the platform and configurations.

[21] HP Sure Click requires Windows 11 Pro or Enterprise. See https://bit.ly/2PrLT6A_SureClick for complete details.

[22] HP Sure Start Gen7 is available on select HP PCs and workstations. See product specifications for availability.

[23] HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher.

[24] HP Sure Recover Gen4 is available on select HP PCs and requires an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.

[25] 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™.

[26] HP Sure Sense requires Windows 11 Pro or Enterprise 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.

[33] HP Sure Admin requires Windows 10 or higher, HP BIOS, HP Manageability Integration Kit from http://www.hp.com/go/clientmanagement and HP Sure Admin Local Access Authenticator smartphone app from the Android or Apple store.

Learn more at
hp.com

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