

# HP Z2 Tower G9 Workstation (B46TWUA)



## 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.

HP recommends Windows 11 Pro for business

### 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 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 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                          |
| Processor family                  | Intel® Core™ i9 14th generation processor                                                                                                                                                                                                                                                                                                              |
| Processor                         | Intel® Core™ i9-14900K (up to 6.0 GHz with Intel® Turbo Boost Technology, 36 MB L3 cache, 24 cores, 32 threads) [6,7]                                                                                                                                                                                                                                  |
| Chipset                           | Intel® W680                                                                                                                                                                                                                                                                                                                                            |
| Memory                            | 64 GB DDR5-4800 MT/s (4 x 16 GB)                                                                                                                                                                                                                                                                                                                       |
| Memory Slots                      | 4 DIMM                                                                                                                                                                                                                                                                                                                                                 |
| Internal Storage                  | 4 TB PCIe® NVMe™ TLC M.2 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™ A5000 (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 <a href="http://www.hp.com/go/zdisplays">www.hp.com/go/zdisplays</a>                                                                                                                                                                                              |
| 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<br>(Standard tower orientation.)                                                                                                                                                                                                                                                                                                 |
| Minimum dimensions (W x D x H)    | 14 x 6.7 x 15.2 in<br>(Standard tower orientation.)                                                                                                                                                                                                                                                                                                    |
| Weight                            | Starting at 6.2 kg<br>(Exact weight depends on configuration.)                                                                                                                                                                                                                                                                                         |
| Weight                            | Starting at 13.7 lb<br>(Exact weight depends on configuration.)                                                                                                                                                                                                                                                                                        |
| 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<br>(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) <sup>[18]</sup>                                                                                                                                              |
| 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 <sup>[19,20,21,22,23,24,25,26,33]</sup>                                                                                                    |
| 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 <sup>[15,16,17]</sup>                                                                                                                                                         |
| UPC number                        | 198828862594                                                                                                                                                                                                                                                                                                                                           |

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](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](http://hp.com)

© Copyright 2024 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel, Pentium, the Intel logo, Intel Core, Thunderbolt, vPro, Optane, and Core Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Bluetooth is a trademark of its proprietor, used by HP Inc. under license. USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. Adobe PDF is a trademark of Adobe Systems Incorporated. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. NVIDIA, the NVIDIA logo, Quadro, and GeForce are trademarks and/or registered trademarks of NVIDIA Corporation in the US. and other countries. Bluetooth is a trademark of its proprietor and used by HP Inc. under license. AMD and Radeon are trademarks of Advanced Micro Devices, Inc. All other trademarks are the property of their respective owners.

