

HP Z2 Tower G5 Workstation (2R1A0PA)



Our most powerful entry workstation that redefines expectations.

We've engineered a whole new level of performance for entry workstations, so you can cut through BIM, rendering and visualization projects without missing a beat. And when your demands change, you have impressive expandability to upgrade.



HP recommends Windows 10 Pro for business

Your new benchmark for entry workstation power.

Unleash the full power of professional graphics and Intel® processors on your compute-heavy workloads. We've designed the system for zero throttling, so your components always run at top speeds without ever overheating or slowing down.

Built to expand. Power to grow.

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

We test it so you can trust it. 24/7.

We know you need performance you can rely on. That's why our products endure over 360K hours of rigorous testing, MIL-STD testing^[1] and software certifications.

Featuring

Windows 10 Pro for Workstations 64

Work without compromising on performance or security with Windows 10 Pro for Workstations, powered by HP's collaboration and connectivity technology. ^[2]

Intel® Core™ i9 processor

Get high-end performance for intensive tasks like rendering and video editing with the Intel® Core™ i9 processor. ^[3]

Specifications

Form factor	Tower
Operating system	Windows 10 Pro for Workstations 64 – HP recommends Windows 10 Pro for business
Processor family	10th Generation Intel® Core™ i9 processor
Processor	Intel® Core™ i9-10900 (2.8 GHz base frequency, up to 5.2 GHz with Intel® Turbo Boost Technology, 20 MB L3 cache, 10 cores) ^[6,7]
Chipset	Intel® W480
Memory	32 GB DDR4-3200 SDRAM (1 x 32 GB)
Memory Slots	4 DIMM
Internal Storage	1 TB HP Z Turbo Drive SATA TLC SSD
Hard drive (2nd)	2 TB 7200 rpm SATA HDD
Internal drive bays	Two 3.5"; Two M.2 NVME 2280 SSD
External drive bays	One 5.25"
Graphics	Discrete
Graphics (discrete)	NVIDIA® Quadro® P2200 (5 GB GDDR5X dedicated)
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics 630
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported. For more information see www.hp.com/go/zdisplays
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 7 kg (Exact weight depends on configuration.)
Weight	Starting at 15.43 lb (Exact weight depends on configuration.)
Keyboard	HP Wired Desktop 320K keyboard
Pointing device	HP USB wired premium mouse
Ports	1 headphone/microphone combo; 2 SuperSpeed USB Type-A 10Gbps signaling rate; 2 SuperSpeed USB Type-A 5Gbps signaling rate
Expansion slots	1 PCIe 3 x4 (x16 connector); 2 PCIe 3 x1 (x4 open ended connector); 1 PCIe 3 x16 (x16 connector); 1 M.2 2230 PCIe 3 x1; 2 M.2 2280 PCIe 3 x4
Ports	1 audio-in; 1 audio-out; 1 RJ-45; 2 USB 2.0; 2 DisplayPort™ 1.4; 2 SuperSpeed USB Type-A 5Gbps signaling rate; 2 SuperSpeed USB Type-A 10Gbps signaling rate
Sustainable impact specifications	Low halogen
Security management	HP Business PC Security Lock Kit; HP Keyed Cable Lock Kit; HP Solenoid Hood Lock and Sensor; HP UltraSlim Cable Lock Kit; HP Secure Erase; HP Sure Click; HP Sure Sense; HP Sure Start Gen6; HP Sure Run Gen3; HP Sure Recover Gen3; HP BIOSphere Gen6; HP Sure Admin; HP Client Security Manager Gen6 ^[15,22,24,25,26,27,28,29,32,34]
Software included	HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Support Assistant; HP PC Hardware Diagnostics Windows; ZCentral Remote Boost; HP Image Assistant; HP Manageability Integration Kit ^[12,16,21,23]
UPC number	195161720550

Top Recommended Displays, Accessories and Services

Z Displays

HP Z24n G2 24-inch Display	1JS09A4
HP Z27n G2 27-inch Display	1JS10A4
HP Z32 31.5-inch 4K UHD Display	1AA81A4

Keyboards

HP Wireless Premium Keyboard	Z9N41AA
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Mice

HP Wireless Premium Mouse	1JR31AA
HP USB Premium Mouse	1JR32AA

Graphics Cards

AMD Radeon Pro W5500 8GB 4DP GFX	9GC16AA
AMD Radeon Pro W5700 8GB 5mDP+USBc GFX	9GC15AA
AMD Radeon Pro WX 3200 4GB (4)mDP GFX	6YT68AA

DDR4 Memory

32GB (1x32GB) 3200 DDR4 ECC UDIMM	141H7AA
16GB (1x16GB) 3200 DDR4 ECC UDIMM	141H2AA
8GB (1x8GB) 3200 DDR4 NECC UDIMM	141J4AA

PC Solid State Drives

HP ZTurbo 2TB TLC Z2 G5 TWR/SFF SSDKit	141M1AA
HP ZTurbo 1TB TLC Z2 G5 TWR/SFF SSDKit	141L5AA
HP ZTurbo 256GB TLC Z2 G5 TWR/SFF SSDKit	141L7AA

Messaging Footnotes

- [1] Undergoes MIL-STD testing. 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 Service.
- [2] 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>.
- [3] 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

- [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.
- [12] HP ZCentral Remote Boost does not come preinstalled on Z Workstations but can be downloaded and run on all Z desktop and laptops without license purchase. With non-Z sender devices, purchase of perpetual individual license or perpetual floating license per simultaneously executing versions and purchase of ZCentral Remote Boost Software Support is required. RGS requires Windows, RHEL (7 or 8), UBUNTU 18.04 LTS, or HP ThinPro 7 operating systems. MacOS (10.13 or newer) operating system is only supported on the receiver side. Requires network access. The software is available for download at hp.com/ZCentralRemoteBoost.
- [15] HP Client Security Manager Gen6 requires Windows and is available on the select HP PCs.
- [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>
- [21] HP Support Assistant requires Windows and Internet access.
- [22] HP BIOSphere Gen6 features may vary depending on the platform and configurations.
- [23] HP Manageability Integration Kit can be downloaded from <http://www8.hp.com/us/en/ads/clientmanagement/overview.html>
- [24] HP Client Security Manager Gen6 requires Windows and is available on the select HP PCs.
- [25] HP Sure Click requires Windows 10 Pro or Enterprise. See https://bit.ly/2PrLT6A_SureClick for complete details.
- [26] HP Sure Start Gen 6 is available on select HP PCs and workstations. See product specifications for availability.
- [27] HP Sure Run Gen3 is available on select Windows 10 based HP Pro, Elite and Workstation PCs with select Intel® or AMD processors
- [28] HP Sure Recover Gen3 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.
- [29] 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
- [32] HP Sure Sense requires Windows 10 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.
- [34] HP Sure Admin requires Windows 10, 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.

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