

# HP Z2 Small Form Factor G5 Workstation (643Z9UT)



**HP's most powerful small form factor, reimagined.**

Get high-end performance in a compact device. Completely redesigned to pack more graphics and processing into less space, you can easily take on complex 3D design projects. And with near endless configuration options, it's the ideal hardware when you need a custom solution.



HP recommends Windows 11 Pro for business

**Performance that defies space constraints.**

Get high-end professional graphics and an Intel® processor in a small form factor. Re-engineered from the ground up, you get full, unthrottled performance for real-time rendering and faster visualizations.

**Make it your own with our most customizable small form factor.**

Build a system matched exactly to your needs with over a million possible configurations. And with customizable I/O ports, you can support new and legacy technologies, dynamic displays and even a second LAN—without messy dongles or adapters.

**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[3] and software certifications.

**Featuring**

**Intel® Core™ i5 processor**

Experience powerful performance and seamless computing for your everyday tasks and higher performance needs with the Intel® Core™ i5 processor. <sup>[1]</sup>

**Security is your top priority**

The HP Wolf Pro Security Edition provides preconfigured enterprise-level PC protection for small and medium sized businesses.

**Smaller, Functional Design**

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

## Specifications

<b>Form factor</b>	Small form factor
<b>Operating system</b>	Windows 11 Pro
<b>Processor family</b>	10th Generation Intel® Core™ i5 processor
<b>Processor</b>	Intel® Core™ i5-10500 (3.1 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 6 cores) <sup>[6,7]</sup>
<b>Chipset</b>	Intel® W480
<b>Memory</b>	8 GB DDR4-3200 MHz RAM (1 x 8 GB)
<b>Memory Slots</b>	4 DIMM
<b>Internal Storage</b>	256 GB HP Z Turbo Drive TLC SSD
<b>Internal drive bays</b>	One 2.5"; One 3.5"; Two M.2 NVME 2280 SSD
<b>External drive bays</b>	One 3.5" HDD
<b>Optical drive</b>	Not included
<b>Graphics</b>	Integrated
<b>Graphics (integrated)</b>	Intel® HD Graphics 630
<b>Compatible displays</b>	All HP Z Displays and HP DreamColor Displays are supported.
<b>Audio</b>	Realtek ALC3205-VA2-CG, 2.0W internal mono speaker
<b>Minimum dimensions (W x D x H)</b>	33.8 x 30.8 x 10 cm (Standard desktop orientation.)
<b>Minimum dimensions (W x D x H)</b>	13.3 x 12.1 x 3.95 in (Standard desktop orientation.)
<b>Weight</b>	Starting at 5.4 kg (Exact weight depends on configuration.)
<b>Weight</b>	Starting at 11.9 lb (Exact weight depends on configuration.)
<b>Keyboard</b>	HP Wired Desktop 320K keyboard
<b>Pointing device</b>	HP Wired 320M Mouse
<b>Ports</b>	1 headphone/microphone combo; 2 SuperSpeed USB Type-A 10Gbps signaling rate; 2 SuperSpeed USB Type-A 5Gbps signaling rate; 1 SuperSpeed USB Type-C® 10Gbps signaling rate
<b>Expansion slots</b>	1 PCIe 3 x4 (x16 connector); 2 PCIe 3 x1 (x1 connector); 1 PCIe 3 x16 (x16 connector); 1 M.2 2230 PCIe 3 x1; 2 M.2 2280 PCIe 3 x4 (1 M.2 2230 slot for WLAN and 2 M.2 2280 slots for storage)
<b>Ports</b>	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
<b>Ports</b>	1 Media Card Reader
<b>Sustainable impact specifications</b>	Low halogen
<b>Security management</b>	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 <sup>[15,20,21,22,24,25,26,27,28,34,35,36]</sup>
<b>Software included</b>	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 <sup>[11,12,16,23]</sup>
<b>UPC number</b>	(ABA) 196548065028; (ABC) 196548065059

Top Recommended Displays, Accessories and Services

<b>Z Displays</b>		
HP Z32 31.5-inch 4K UHD Display		1AA81A4
<b>Keyboards</b>		
HP Wireless Premium Keyboard		Z9N41AA
<b>Mice</b>		
HP Wireless Premium Mouse		1JR31AA
<b>Graphics Cards</b>		
AMD Radeon Pro WX 3200 4GB (4)mDP GFX		6YT68AA
NVIDIA Quadro P400 2GB Graphics		1ME43AA
NVIDIA Quadro P1000 4GB Graphics		1ME01AA
<b>PC SATA Hard Drives</b>		
HP 1TB Enterprise SATA 7200 HDD		W0R10AA
HP 4TB SATA 7200 Hard Drive		K4T76AA

## Messaging Footnotes

[1] 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] 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.

## Technical Specifications Footnotes

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

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

[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](http://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>

[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 select HP Elite, Pro and Workstations.

[25] HP Sure Click requires Windows 11, Windows 10 Pro or Enterprise. See [https://bit.ly/2PrLT6A\\_SureClick](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 11, 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.

[34] 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

[35] HP Sure Sense requires Windows 11, 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.

[36] HP Sure Admin requires Windows 11, 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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