

HP Z2 Tower G5 Workstation (523Z5EA)



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.



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 64

Work without compromising on performance or security with Windows 10 Pro, 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. [2]

Smaller, Functional Design

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

Specifications

Form factor	Tower
Operating system	Windows 10 Pro (Device comes with Windows 10 and a free Windows 11 upgrade or may be preloaded with Windows 11. Upgrade timing may vary by device. Features and app availability may vary by region. Certain features require specific hardware (see Windows 11 Specifications).)
Processor family	10th Generation Intel® Core™ i3 processor
Processor	Intel® Core™ i3-10100 (3.6 GHz base frequency, up to 4.3 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores) ^[6,7]
Number of processors	1
Chipset	Intel® W480
Memory	32 GB DDR4-3200 MHz RAM (2 x 16 GB)
Memory Slots	4 DIMM
Internal Storage	1 TB HP Z Turbo Drive TLC SSD
Internal drive bays	Two 3.5"; Two M.2 NVME 2280 SSD
External drive bays	One 5.25"
Optical drive	9.5 mm Slim DVD-Writer
Graphics	Discrete
Graphics (discrete)	NVIDIA RTX™ A2000 (6 GB GDDR6 dedicated)
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics 630
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported.
Audio	Realtek ALC3205-VA2-CG, 2.0W internal mono speaker
Dimensions (W x D x H)	35.6 x 16.9 x 38.5 cm (Standard tower orientation.)
Weight	Starting at 7 kg (Exact weight depends on configuration.)
Keyboard	HP Wired Desktop 320K Keyboard
Pointing device	HP Wired 320M 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); 1 PCIe 3 x16 (x16 connector); 1 M.2 2230 PCIe 3 x1; 2 M.2 2280 PCIe 3 x4; 2 PCIe® 3 x1 (x4 connector) (1 M.2 slot for WLAN and 2 M.2 2230/2280 slot for storage.)
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	(A2N) 196337608276; (AB6) 196337608283; (AB8) 196337608290; (AB9) 196337608306; (ABB) 196337608313; (ABD) 196337608320; (ABE) 196337608337; (ABF) 196337608344; (ABH) 196337608351; (ABN) 196337608368; (ABT) 196337608375; (ABU) 196337608382; (ABV) 196337608399; (ABY) 196337608405; (ABZ) 196337608412; (ACB) 196337608429; (ACQ) 196337608436; (AK8) 196337608443; (AKC) 196337608450; (AKD) 196337608467; (BCM) 196337608474; (UUG) 196337608498; (UUW) 196337608504; (UUZ) 196337608511
Manufacturer Warranty	3 year (3/3/3) limited warranty includes 3 years of parts, labor and on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply.

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
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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

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] 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 11 Pro or 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 11 or 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 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.

[34] HP Sure Admin requires Windows 11 or 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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