

HP Z4 Rack G5 Workstation (B31M2UA)



Compactly Rackable. Uniquely Powerful

Empower a flexible workforce with Z by HP pro-level performance in a high-density 1U footprint. Specifically designed to pack more units in a single rack, this slim powerhouse delivers the performance your team needs. All with the ability to upgrade and expand as compute demands evolve.



HP recommends Windows 11 Pro for business

Workhorse Power. Compact 1U size

This 1U workstation packs impressive power for advanced VFX, 3D modeling, and rendering. Get an Intel® Xeon® W-series CPU,^[1] support for entry or high-end graphics, and large memory configurations, all with room to upgrade and expand.

Upgrade and expand with ease

Invest in the technology you need now and expand as the compute demands of your workforce evolve. With an easily accessible, tool-less design, get access to add or swap components—like graphics, memory, and storage.

Comprehensive security. Reliability you can trust.

Get peace of mind with a workstation that's built to endure. The Z4 Rack undergoes 360K hours of rigorous testing and is certified for pro apps. And with HP Wolf Security for Business, it's protected below, in, and above the OS.^[2]

Featuring

Intel® Xeon® W processor

Get optimized performance whether your professional application utilizes high core count or high frequency with the Intel® Xeon® W processor.^[1]

NVIDIA RTX™ Graphics

Tackle advanced video editing, machine learning and simulation projects

Ultra Fast Memory Configurations

Accelerate your workflow and power through memory-intensive workloads with fast visualization, advanced visual effects, and rendering.

Expansion Slots

Support the highest performance workflows, today and beyond.

Power Supply

With dual power supply, you have power to stay up and running. Choose an aggregated option—combining two 675W power supplies—or a redundant option for critical workflows.

Specifications

Form factor	1U rackable workstation
Operating system	Ubuntu
Processor family	Intel® Xeon® W processor
Processor	Intel® Xeon® W5-2455X (up to 4.4 GHz with Intel® Turbo Boost Technology, 30 MB L3 cache, 12 cores, 24 threads) [6,7]
Chipset	Intel® W790
Memory	64 GB DDR5-4800 MT/s (2 x 32 GB)
Memory Slots	4 DIMM
Internal Storage	1 TB HP Z Turbo Drive PCIe® Gen4 TLC M.2 SSD
Internal drive bays	Two 2.5" M.2 or one 3.5" SATA
External drive bays	Two 2.5" M.2
Graphics	Discrete
Graphics (discrete)	NVIDIA RTX™ A2000 (12 GB GDDR6 dedicated)
Audio	Realtek ALC3205-CG
Minimum dimensions (W x D x H)	4.3 x 43.8 x 65.6 cm (without rack mounting ears)
Minimum dimensions (W x D x H)	1.69 x 17.25 x 25.8 in (without rack mounting ears)
Weight	Starting at 9.5 kg (without rack rails); Starting at 12.5 kg (with rack rails) (Exact weight depends on configuration.)
Weight	Starting at 21.6 lb (without rack rails); Starting at 27.6 lb (with rack rails) (Exact weight depends on configuration.)
Keyboard	HP USB 320K Keyboard
Pointing device	HP Wired 320M Mouse
Ports	4 USB Type-A 5Gbps signaling rate (1 charging); 1 headset connector
Expansion slots	2 M.2 PCIe 4 x4; 1 PCIe 5 x16 mechanical (x8 electrical); 1 PCIe 5 x8 mechanical (x8 electrical); 1 PCIe 5 x16 mechanical (x8 or x16 electrical) (PCIe slots 2 and 3 only come standard if the configuration demands them. Otherwise, they are an optional add-on feature via the Dual Slot Riser, which can be configured CTO or aftermarket.)
Ports	2 USB Type-A 5Gbps signaling rate; 1 RJ-45
Management features	HP Anyware Remote System Controller; HP Client Management Script Library (download); HP Cloud Recovery; HP Driver Packs; HP Image Assistant Gen5 (download) [8,28,29,31]
Security management	Full volume encryption; HP Secure Erase; Kensington lock slot; Secure authentication; TPM 2.0 certified; HP BIOSphere; HP Sure Run; HP Sure Click; HP Sure Sense; HP Sure Admin; HP Platform Certificate; HP Sure Start; HP Sure Recover; Self-Encrypted Drives [13,14,15,16,17,18,19,20]
Software included	HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Support Assistant; HP PC Hardware Diagnostics Windows; HP Privacy Settings; HP Desktop Support Utilities; HP Manageability Integration Kit; HP Notifications; HP Anyware; HP Data Science Stack; HP Services Scan; HP Data Science Stack Manager; myHP [8,10,11,12,26,27,30,32]
UPC number	198828577023

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 Surround 80 UC USB-C Headset +USB-C/A Adapter	8G7T9AA
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
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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.

[2] HP Wolf Security for Business requires Windows 10 Pro or higher, includes various HP security features and is available on HP Pro, Elite and Workstation products. See product details for included security features and OS requirement.

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.

[8] Optional or add-on feature.

[10] 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>.

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

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

[13] HP Sure Click requires Windows 10 or 11 Pro or higher. See https://bit.ly/2PrLT6A_SureClick for complete details.

[14] HP Sure Start requires Windows 10 or 11 or higher.

[15] 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.

[16] HP Sure Sense requires Windows 10 or 11 Pro or Enterprise and higher.

[17] HP Sure Run Gen5 requires Windows 10 or 11 Pro or higher.

[18] 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.

[19] 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™.

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

[26] Network access required. HP Anyware software and licensing are available through a 1- or 3-year subscription. Renewal is required after the subscription term. HP Anyware subscriptions are based on the number of concurrent PCoIP connections used (pay for the number of host connections, not the software) with a minimum order quantity of 5. For a limited time, an HP Anyware Professional subscription also includes access and support for ZCentral Remote Boost and ZCentral Connect and is available for purchase through an HP reseller or contact sales at hp.com/Anyware. ZCentral Remote Boost Sender requires Windows 10 and 11, RHEL/CentOS (7 or 8), or UBUNTU 18.04 or 20.04 LTS operating systems. macOS (10.14 or newer) operating system and ThinPro 7.2 are only supported on the receiver side. ZCentral Connect requires Windows (10 or 11) or Windows Server (2016 or 2019) operating system, Microsoft Active Directory and Intel Active Management Technology for select features. For system requirements and to install HP Anyware and Anyware Manager, refer to the Admin Guides at: <https://docs.teradici.com/find/product/hp-anyware>.

[27] Z by HP Data Science Stack Manager requires Windows 10 version 21H2 (Build 19044) and higher or 64-bit Ubuntu 20.04 and is available on select Z workstations.

[28] HP Anyware Remote System Controller is an optional feature.

[29] Internet access required. Automation of tasks and viewing system information only available with select Z desktop workstations, see datasheet for details. Fleet management and viewing of consolidated reports from all devices requires HP Anyware Remote System Management. HP Anyware Integrated Remote System Controller not compatible with Z2 Mini platforms and not recommended for non-Z devices. HP service and support not available for non-Z devices. Full suite of hardware alerts available with select Z desktop workstations. See datasheet for details.

[30] myHP requires Windows OS.

[31] HP Cloud Recovery is available for Z by HP, HP Elite and Pro desktops and laptops PCs with Intel® or AMD processors and requires an open, wired network connection. Note: You must back up important files, data, photos, videos, etc. before use to avoid loss of data. For details, please refer to: <https://support.hp.com/us-en/document/c05115630>.

[32] HP Services Scan is provided with Windows Update on select products and will check entitlement on each hardware device to determine if an HP TechPulse-enabled service has been purchased, and will download applicable software automatically. HP TechPulse is a telemetry and analytics platform that provides critical data around devices and applications. For full system

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