ProductSheet
HP Z6 G5 Tower Workstation (81N31UT)

Unleash extreme graphics performance

Accelerate your most graphics-intensive projects—from machine learning and simulation to advanced visual effects. The Z6 desktop workstation is redesigned with new, powerful single socket technology and now fits up to 3x more GPUs than the previous gen while also providing plenty of room to expand.



HP recommends Windows 11 Pro for business

Remarkable performance. Whisper-quiet acoustics
Speed up graphics-intensive workflows with high-end GPUs, an Intel® Xeon® W CPU, and loads of DDR5 memory.

Upgrade and expand with ease
Evolve your PC with space for high-end GPUs, loads of memory and storage, plus front-accessible NVMe drives.

Comprehensive security. Reliability you can trust
Trust the 360K hours of testing, certifications for pro apps, and world-class HP Wolf Security for Business[7]

Featuring

Windows 11
Work anywhere without compromising on performance or security with Windows 11 powered by HP's collaboration and connectivity technology.

Intel® Xeon® W processor
Get optimized performance whether your professional application utilizes high core count or high frequency with the Intel® Xeon® W processor. [2]

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

Specifications

Form factor	Tower
Operating system	Windows 11 Pro
Processor family	Intel® Xeon® W processor
Processor	Intel® Xeon® W5-3435X (up to 4.7 GHz with Intel® Turbo Boost Technology, 45 MB L3 cache, 16 cores, 32 threads) [6,7]
Chipset	Intel® W790
Memory	32 GB DDR5-4800 MHz RAM (2 x 16 GB)
Internal Storage	512 GB HP Z Turbo Drive PCIe® NVMe™ TLC M.2 SSD
Internal drive bays	Four PCIe® M.2 SSD; Four 3.5" HDD
External drive bays	Four NVMe™ M.2 SSD; Two 3.5" HDD; Two 9.5 mm ODD
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported. For more information see http://www.hp.com/go/zdisplays
Audio	Realtek ALC3205-CG
Minimum dimensions (W x D x H)	16.89 x 46.48 x 44.45 cm
Minimum dimensions (W x D x H)	6.65 x 18.30 x 17.50 in
Weight	Starting at 12.8 kg *(Exact weights depend upon configuration (System weight only))*
Weight	Starting at 28.2 lb *(Exact weights depend upon configuration (System weight only))*
Keyboard	HP USB 320K Keyboard
Pointing device	HP Wired 320M Mouse
Ports	2 SuperSpeed USB Type-C® 20Gbps signaling rate (USB Power Delivery); 2 SuperSpeed USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo[29]
Expansion slots	2 PCIe 4 x4; 2 PCIe 4 x16; 1 PCIe 3 x16; 1 PCIe 5 x16 *(Rear bulkhead access can be achieved through all slots but 2 PCIe 4 x8 are internal access only for M.2.)*
Ports	4 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo
Package dimensions (W x D x H)	31.3 x 61.0 x 59.3 cm
Package weight	Starting at 17.25 kg
Management features	HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support
Sustainable impact specifications	Low Halogen; 40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; External power supply 90% efficiency; Plastic cushion inserts contain 80% recycled content; Ocean-bound plastic in system fan; 10% post-industrial recycled metal; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable
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[20,21,22,23,24,25,26,27]
Software included	HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Support Assistant; HP PC Hardware Diagnostics Windows; HP Image Assistant; HP Manageability Integration Kit; HP Anyware; HP Data Science Stack Manager[17,18,19]
UPC number	(ABA) 197497248777; (ABC) 197497248784

Top Recommended Displays, Accessories and Services

No Top Recommended Displays, Accessories and Services

Messaging Footnotes

[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.

[7] HP Wolf Security for Business requires Windows 10 or 11 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.

[17] 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 .

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

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

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

[21] HP Sure Start Gen7 is available on select HP PCs and Workstations. See product specifications for availability.

[22] 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.

[23] 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.

[24] HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher.

[25] 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.

[26] HP Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88.

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

[29] Front entry contain: 1 headset connector; 4 SuperSpeed USB Type-A 5Gbps signaling rate. Front Entry and Front Premium offer Battery Charging 1.2 through one of the USB Type-A ports.

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