

HP Z6 G5 Tower Workstation (81N34UT)



Overview

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.

Remarkable performance. Whisper-quiet acoustics

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

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]

Upgrade and expand with ease

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

Maximize your IT lifecycle

Designed for simpler IT management, the Z6 is built for longevity with a 3 year lifecycle—longer than entry workstations. Plan for the future and avoid re-qualifying devices every year, saving you serious time and money.

Features

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.

[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.

[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.

Specifications

Form factor	Tower
Operating system	Windows 11 Pro
Processor family	Intel® Xeon® W processor
Processor	Intel® Xeon® W5-3425 (up to 4.6 GHz with Intel® Turbo Boost Technology, 30 MB L3 cache, 12 cores, 24 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 <i>(Exact weights depend upon configuration (System weight only))</i>
Weight	Starting at 28.2 lb <i>(Exact weights depend upon configuration (System weight only))</i>
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 <i>(Rear bulkhead access can be achieved through all slots but 2 PCIe 4 x8 are internal access only for M.2.)</i>
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) 197497248067; (ABC) 197497248081

Additional specifications

Available software	HP Smart Support
ECC memory	non-ECC
Graphics	Discrete
Graphics (discrete)	NVIDIA RTX™ A4000 (16 GB GDDR6 dedicated)
Graphics card brand	NVIDIA®
Graphics card form factor	PCIe x16
Graphics card memory size	16
Graphics card memory size uom	GB
Graphics card memory type	GDDR6
I/O Port location	Front (Entry version)
I/O Port location	Front (Premium version)
Keyboard interface	USB
Legal tagline	HP recommends Windows 11 Pro for business
Memory and storage	32 GB memory; 512 GB SSD storage
Memory layout (slots & size)	2 x 16 GB
Memory module type	DIMM
Memory size	32
Memory size uom	GB
Memory speed	4800
Memory speed uom	MHz
Memory type	DDR5
Model Number	RTX™ A4000
Number of memory slots	2
Package dimensions (W x D x H)	12.32 x 24.02 x 23.35 in
Package weight	Starting at 38.03 lb
Playbook TS icon OS	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905482.png
Playbook TS icon battery life	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905264.png
Playbook TS icon connectivity	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201987.png
Playbook TS icon dimensions tower	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201997.png
Playbook TS icon graphics	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08169202.png
Playbook TS icon memory	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08267700.png
Playbook TS icon processor	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201972.png
Playbook TS icon storage	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08192819.png

Playbook TS icon weight imperial	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c05790117.png
Playbook TS icon weight metric	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08267650.png
Processor Brand	Intel®
Processor cache	30 MB L3
Processor core	12
Processor family	Xeon® W
Processor frequency technology	Intel® Turbo Boost Technology
Processor maximum frequency	4.6
Processor maximum frequency uom	GHz
Processor model	3425
Processor threads	24
Product long name specifications	HP Z6 G5 Tower Workstation, Windows 11 Pro, Intel® Xeon® W, 32GB RAM, 512GB SSD, NVIDIA® RTX™ A4000
Product short name specifications	HP Z6 G5 Tower Workstation, Intel® Xeon® W, 32GB RAM, 512GB SSD
Security Software Licenses	HP Wolf Pro Security Edition (1 year)
Standard memory note	Transfer rates up to 4800 MT/s.
Storage brand 01	HP Z Turbo Drive
Storage capacity	512
Storage capacity uom 01	GB
Storage controller	Integrated SATA 6.0 Gb/s; Integrated RAID 0, 1 available for SATA drives
Storage form factor 01	M.2
Storage interface 01	PCIe®
Storage interface protocol 01	NVMe™
Storage memory technology 01	TLC
Storage type	SSD
Storage type 01	SSD
UNSPSC code	43211515

[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.

Disclaimer — Copyright

Intel, Core are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. AMD and Radeon are trademarks of Advanced Micro Devices, Inc. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. NVIDIA is trademark and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. USB Type-C® is registered trademarks of USB Implementers Forum. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. All other trademarks are the property of their respective owners.

© Copyright 2023 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.