ProductSheet HP Workstation Z6 G4 Tower (643W0UT)



A future-proof powerhouse

No matter what the future holds, you'll have all the performance you need. Ideal for VFX and rendering, this workhorse offers a wide range of processing power and the flexibility to upgrade components over time.



HP recommends Windows 11 Pro for business Designed to grow with you

Invest only in the technology you need today, and easily upgrade in the future. Scale up with a broad range of configurations from single or dual processors to multiple graphics cards.

Relentless power

Take on demanding workloads with high-powered processors, professional graphics and 768 GB of memory. Experience seamless performance during graphics-intensive work, such as visual effects and design visualization.

HP's most secure workstations

Advanced security features come standard on every Z6. Rest assured your device, identity and data are safe with security software like HP Client Security Suite[2] and HP Sure Start, the industry's first self-healing BIOS with intrusion detection.

Featuring

Intel[®] Xeon[®] processor

Get professional-class speed to maximize your performance and uptimes on the most demanding professional workflows with the Intel® Xeon® processor. ^[3]

Security is your top priority

The HP Wolf Pro Security Edition provides preconfigured enterprise-level PC protection for small and medium sized businesses. ^[3]

Graphics

Get serious about graphics and reach peak productivity with access to a breadth of NVIDIA® and AMD professional graphics from entry to ultra 3D.^[4]

Storage

Install the fastest professional grade storage hardware around, unlocking performance for storage-bound applications without sacrificing standard PCIe slots.

Deliberate design

The Z6 workstation's sleek, iconic design doesn't compromise on quiet, reliable performance.

Specifications

Operating system	Windows 11 Pro	
Processor family	Intel® Xeon® Gold processor	
Processor	Intel® Xeon® Gold 6226R (2.9 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 22 MB L3 cache, 16 cores) ^[6,7]	
Chipset	Intel® C622	
Memory	16 GB DDR4-2933 MHz RAM (2 x 8 GB)	
Memory Slots	12 DIMM with 2 processors	
Internal Storage	512 GB HP Z Turbo Drive PCIe [®] M.2 SSD	
Internal drive bays	Two 2.5" or 3.5"	
External drive bays	Two 5.25"	
Optical drive	HP Slim DVD-Writer	
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported.	
Minimum dimensions (W x D x H)	16.9 x 46.5 x 44.5 cm	
Minimum dimensions (W x D x H)	6.65 x 18.3 x 17.5 in	
Weight	Starting at 13.1 kg (Exact weight depends on configuration.)	
Weight	Starting at 29 lb (Exact weight depends on configuration.)	
Keyboard	HP USB Slim Business Keyboard	
Pointing device	HP USB wired optical mouse	
Ports	1 headset connector; 4 USB 3.1 (1 charging) (Premium front includes: 1 headset, 2 USB 3.1 Gen1 (1 charging), 2 USB 3.1 Gen 2 Type-C™.)	
Expansion slots	3 PCIe x4; 1 PCIe x8; 2 PCIe x16; 2 M.2 PCIe x4 (Slot 1: CPU with open-ended connector. Slots 3 and 6: PCH with open-ended connector. Slot 4: CPU with open-ended connector (slot converts to x4 electrical when SSD is installed in 2nd M.2 slot). M.2 Slots 1 and 2: CPU up to 80 mm storage devices.)	
Ports	6 USB 3.1 Gen 1; 2 RJ-45 (1 GbE); 1 audio-in; 1 audio-out; 1 PS/2 mouse port; 1 PS/2 keyboard port; 1 serial	
Power	1000 W internal power supply, up to 90% efficiency, active PFC	
Sustainable impact specifications	Low halogen	
Security management	HP Sure Start Gen3; Secure authentication; Kensington lock slot; Full volume encryption; HP Keyed Cable Lock Kit; TPM 2.0 certified; HP Secure Erase ^[14,15,18]	
Software included	HP Performance Advisor; HP Remote Graphics Software (RGS)	
UPC number	(ABA) 196548064137; (ABC) 196548064199	

Top Recommended Displays, Accessories and Services

Z Displays	
HP Z32 31.5-inch 4K UHD Display	1AA81A4
Keyboards	
HP USB Premium Keyboard	Z9N40AA Z9N41AA
HP Wireless Premium Keyboard	
Graphics Cards	
NVIDIA Quadro RTX 4000 8GB (3)DP+USBc	5JV89AA
NVIDIA Quadro RTX 8000 48GB (4)DP+USBc	6NB51AA
NVIDIA Quadro RTX 5000 16GB (4)DP+USBc	5JH81AA
DDR4 Memory	
HP 8GB (1x8GB) DDR4-2666 ECC Reg RAM	1 X D 8 4 A A
16GB (1x16GB) DDR4-2666 ECC Reg RAM	1XD85AA
HP 32GB (1x32GB) DDR4-2933 ECC RegRAM	5YZ55AA
PC SATA Hard Drives	
HP 6TB Enterprise SATA 7200 HDD	3DH90AA
PC Solid State Drives	
HP Z Turbo Drive Dual Pro 2TB SSD	4YF63AA

Messaging Footnotes

[2] HP Client Security Suite features vary by platform.

[3] 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.

[4] Sold separately or as an optional feature.

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.

[14] HP Sure Start Gen3 is available on HP EliteBook, HP ZBook, and HP Z Workstation products equipped with Intel® 7th generation processors.

[15] HP Secure Erase: For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88. Supported on Elite platforms with BIOS version F.O3 or higher.

[18] HP Keyed Cable Lock Kit is available only as an aftermarket option.

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