eDatasheet

HP Z8 G4 Workstation (7BG96UT)

HP's most powerful desktop workstation [2]

Top-of-the-line power to fuel those who reimagine our world. When you need a workstation with the capability to run complex simulations, handle advanced Machine Learning algorithms and process huge amounts of data, the HP Z8 doesn't disappoint.



HP recommends Windows 10 Pro.

Extreme power

Run 3D simulations and edit 8K video in real time with up to 56 processing cores and up to 3 TB high-speed memory. Certified for serious software, such as ANSYS or After Effects, you can ideate and iterate more to deliver better work in less time.

Industry-leading design and acoustics

From the inside out, the Z8 is an engineering wonder. The modern exterior provides tool-free access to a clean, modular interior. Strategically placed vents and ducts throughout the system streamline airflow for ultra-quiet performance.

HP's most secure workstations

Advanced security features come standard on every Z8. Rest assured your device, identity and data are safe with security software like HP Client Security Suite Gen3[3] and HP Sure Start Gen3[8], the industry's first self-healing BIOS with intrusion detection.

Featuring

Operating Systems

Support your unique user needs with a choice of Windows 10 Pro 64 or Linux® operating systems. [1]

Processing

Achieve the performance you need with the ability to support two next generation Intel® Xeon® processors for up to 56 total processor cores in one system. ^[4]

NVIDIA Quadro GV100

Give ML developers high-performance GPU-accelerated algorithm development tools with support for the NVIDIA Deep Learning SDK and many widely used deep learning frameworks.

Memory

Easily handle massive data sets with 24 memory slots supporting up to 3 TB of high-speed memory. $^{[7]}$

Expandability

Get ultra-flexible configuration with 7 high-performance PCIe Gen3 slots and get additional expandability supporting up to 4 PCIe storage devices with optional slots. ^[6]

Specifications

Operating system	Windows 10 Pro 64
Processor family	Intel® Xeon® Silver processor
Processor	Intel® Xeon® Silver 4214 (2.2 GHz base frequency, up to 3.2 GHz with Intel® Turbo Boost Technology, 16.5 MB cache, 12 cores) ^[6,7]
Chipset	Intel® C622
Memory	16 GB DDR4-2933 SDRAM (2 x 8 GB)
Memory Slots	24 DIMM with 2 processors
Internal Storage	1 TB 7200 rpm SATA
Hard drive (2nd)	256 GB HP Z Turbo Drive PCIe® SSD
Internal drive bays	Four 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. For more information see www.hp.com/go/zdisplays.
Minimum dimensions (W x D x H)	21.59 x 55.12 x 44.45 cm
Minimum dimensions (W x D x H)	8.5 x 21.7 x 17.5 in
Weight	Starting at 22.4 kg (Exact weight depends on configuration.)
Weight	Starting at 49.4 lb (Exact weight depends on configuration.)
Keyboard	HP USB Business Slim Keyboard
Pointing device	HP USB 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	2 PCle x4; 3 PCle x8; 4 PCle x16 (1 PCle x8 has rear bulkhead access and 2 PCle x8 are internal access only. Slot 1: Transforms to PCle x8 when 2nd CPU is installed. Slots 3 and 6: are available only when 2nd processor is installed. PCle x16 - Available only when 2nd processor is installed.)
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	1700 W internal power supply, up to 90% efficiency, active PFC; 1450 W internal power supply, up to 90% efficiency, active PFC; 1125 W internal power supply, up to 90% efficiency, active PFC
Environmental	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]

Accessories and services

No Recommended Accessories and Services

Messaging Footnotes

- [1] Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com
- [2] Based on desktop workstations as of June 14, 2017 and power based on processor, graphics, memory, and power supply.
- [3] HP Client Security Suite Gen3 requires Windows and Intel® or AMD 7th Gen processors.
- [4] 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.
- [6] Sold separately or as an optional feature.
- [7] Available in the first half of 2018.

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

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