HP Z8 G4 Workstation

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.



*Product image may differ from actual product

HP recommends Windows 11 Pro for business

Extreme power

 Run 3D simulations and edit 8K video in real time with up to 56 processing cores and up to 1.5 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 toolfree 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 Gen3³ and HP Sure
Start Gen3⁸, the industry's first self-healing BIOS with intrusion detection.

Featuring

- Support your unique user needs with a choice of Windows 10 Pro 64 or Linux® operating systems.¹
- 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
- 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.
- Easily handle massive data sets with 24 memory slots supporting up to 3 TB of high-speed memory.⁷
- Get ultra-flexible configuration with 7 high-performance PCle Gen3 slots and get additional expandability supporting up to 4 PCle storage devices with optional slots.⁶
- Providing a choice of 1125W, 1450W and 1700W 90% efficient power supplies, the Z8 fires
 up the maximum levels of processing, memory, graphics, storage and I/O configurability.
- Designed with two ports of lightning-quick 10 GbE network connection at a lower cost than standard PCle add-in cards and with Thunderbolt™ 3 technology for fast data transfers.^{5,7}
- The tool-less chassis lets you quickly and easily access the interior for upgrades and maintenance.
- The Z8 workstation's modern, sophisticated look features built-in handles for easy relocation.
- Innovative acoustic design allows full range configurations to run cool and quiet for maximized productivity.
- Future-proof your Z with Intel[®] Optane[™] DC Persistent Memory for the best price/performance with the ability to load large data sets entirely into memory for fast access and application responsiveness.⁹

HP Z8 G4 Workstation Specifications Table







*Product im	age may	differ	from	actual	product
-------------	---------	--------	------	--------	---------

Froduct image may differ from actual produ			
Available Operating Systems	Windows 11 Po for Windstations ^{21,122} Windows 10Po for Windstations ^{21,122} Ubunita 20.04 ITS ²⁵ Ubunita 20.04 ITS ²⁵ 4P Invalide Kif for Linuxe ²¹		
	re insulare in to Linux." Red Haff Enterprise Linux ^{ed 3} Ubuntu 20.04 LTS, 64 bit version. HP Linux-ready, Red Hat ^e Enterprise Linux ^{ed} drop-in-box, 1 year entitlement		
Processor family	Intel® Xeon® Scalable processor		
Available Processors ^{2,3}	Intel® Novem* 5 West of 210 (2.4 Oct 24) these frequency, up to 3.6 of 24 with intel®* Turbo Boost Technology, 1.5 MB 13 cache, 1.0 cores Intel®* Novem* 5 West of 210 (3.2 of 24) these frequency, up to 3.6 of 24 with intel®* Turbo Boost Technology, 1.5 MB 13 cache, 1.0 cores Intel®* Novem* 6 (3.6 of 24.2 of 2		
Chipset	Intel® Moore® GG-GR GLA GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 35.7 MBL3 cache, 16 cores, 32 threads) Intel® KG29 Intel® KG29		
·			
Maximum memory	3 TB DDR4-2666 ECC SDR4M; 1.5 TB DDR4-2933 ECC SDR4M ²⁰ Transfer rates up to 2933MT/s.		
Memory slots	24 DMM with 2 processors		
Internal storage	300 (8 S4S 15000 pm ¹ 500 (8 b to 2 15 MAN (7200 pm ¹ 500 (8 b to 2 15 MAN (7200 pm ¹) 500 (8 b to 2 15 MAN (7200 pm ¹) 118 up to 6 18 7200 pm 541A Enterprise ⁴ 256 (8 up to 2 15 MAN (7200 pm 541A Enterprise ⁴ 256 (8 up to 1 15 MAN (7200 pm 541A Enterprise ⁴ 256 (8 up to 1 18 18 AV (7200 pm 541A Enterprise ⁴ 256 (8 up to 1 18 18 2 Up to 10 MAN (7200 pm 541A ENTERPRISE ⁴ 256 (8 up to 1 18 18 2 Up to 10 MAN (7200 pm 541A ENTERPRISE ⁴ 256 (8 up to 1 18 18 2 Up to 10 MAN (7200 pm 541A ENTERPRISE ⁴ 256 (8 up to 1 18 18 2 Up to 10 MAN (7200 pm 541A ENTERPRISE ⁴ 256 (8 up to 1 18 18 2 Up to 10 MAN (7200 pm 541A ENTERPRISE ⁴ 256 (8 up to 1 18 18 2 Up to 10 MAN (7200 pm 541A ENTERPRISE ⁴		
Additional storage	256 GB up to 4 TB HP 2 Turbo Drive Dual Pro PCIe* SSD* HP SD 4 Media Card Reader (notional)		
Optical drive ^{5,6}	re-so-re-read-autor response republicant and re-response r		
Available Graphics	HP 3um UDV-8UM: HP 3um UDV-8UM: HP 3um UDV-4UM: HP 3um UDV-4Wiser Entry 3 IX NUIDR-4 audum* Paul OF 2 GB 000R6 dedicated; NUIDA* Quadra* P620 CB GD0R6 dedicated; NUIDA* Quadra* P620 CB GD0R6 dedicated; NUIDA* Quadra* P620 GB GD0R6 dedicated; NUIDA* P620 GB GD0R		
Expansion slots	2 PCle xit; 3 PCle xit; 4 PCle x 16 (1 PCle xit has rear builthead access and 2 PCle xit are internal access only. Slot 1: Transforms to PCle xit when 2nd CPU is installed. Slots 3 and 6: are available only when 2nd processor is installed. PCle x 16 - Available only when 2nd processor is installed.		
Ports and Connectors	Front: I hasded correctors (1853.1) (1 charging) Rever (18		
Available Keyboards ¹⁰	HP Wireless Business Slim Kleyboard and Mouse Combot: HP USB Business Slim Kleyboard; USB Premium wired keyboard;		
Available Pointing Devices ¹⁰	3 Doornesion CADMouse; PH USB Optical Mouse; HP PS/2 Mouse; HP PS/2 Mouse; HP USB Hardened Mouse HP dual-port 10/d8ese-TNC Intergrated Intel® 12-91-UP PDE® GE Integrated Intel® 12-91-UP PDE® GE Integrated Intel® 12-91-UP PDE® Intel® 17-91-UD GE-SPS - STRIATSREEWEY INTER® 17-91-UD GE-		
Communications	Integral LD 17 Augler and Code No. Intel® YSS-01-2 dail-port Code No. Intel® SS-01-2 Code No. Intel® Ds-01-2 Code No. Intel® Ds-01-2 Code No. Intel® Ds-01-2 dail-port Code No. Intel® Ds-01-2 dail-port Code No. Intel® Ds-01-2 dail-port Vision SS-01-2 dail-polynifac (Z-22) Wi-Fi [®] and Bluetooth [®] 4.2 Combo, non-4Pro [™] Intel® Ds-01-2 dail-polynifac No. Intel® Ds-01-2 dail-po		
Drive Bays	Two 5.25°; Four 2.5° or 3.5° ¹⁶		
Software	HP Performance Advisor; HP Remote Graphics Software (RIGS)		
Security management ^{14,15,18}	HP Sure Starf Gent); Secure authentication; Kensington lock slot; Full volume encryption; HP Keyed Cable Lock Kit; TPM 2.0 certified; HP Secure Erase		
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		
Dimensions Weight	8.5 x 2.1.7 x 17.5 in; 21.59 x 55.12 x 44.45 cm Starting at 49.4 tb: Starting at 22.4 kg (Exact weight depends on conflouration.)		
Weight Energy efficiency compliance			
Energy efficiency compliance Sustainable impact specifications 12	ENERGY STAR® certified and EPEAT® Sliver registrered configurations available; ENERGY STAR® certified and EPEAT® 2019 registered where applicable. EPEAT® registration varies by country. See www.apeat.net for registration status by country. 11 Inva belowen		
Compatible displays	Lov hadgen All HP Z Disbleys and HP Desmirkfolor Displays are supported.		
Warranty	ner re _ uppupps and re recentious uppupps are esupported. Protected by Provinces including a version substrated by a version and 3 version and 3 version and 2 version and 3 version a		
	The state of the s		

HP Z8 G4 Workstation

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 supple 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.
- 5 HP dual-port 10GBase-T NIC is sold separately or as an optional feature.
- Sold separately or as an optional feature.
 Available in the first half of 2018.
- ⁸ HP Sure Start Gen3 is available on HP EliteBook, HP ZBook, and HP Z Workstation products equipped with Intel[®] 7th generation processors. Screen image courtesy of Renault Sport Racing
- Screen image courtesy of Chris McLennan
- 9 Supported only with Xeon 82xx, 62xx, 52xx and 4215 processors. Available as factory configured in Memory Mode or Storage Mode. See Quick Specs for more information

Technical Specifications 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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.

 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.

 ³ Some vPro functionality of this technology, such as Intel[®] Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for
- Intel vPro technology is dependent on 3rd party software providers. Microsoft Windows required.

 4 For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB (for Windows) is reserved for system recovery software
- 5 Duplication of copyrighted material is strictly prohibited. Actual speeds may vary. Double Layer media compatibility will widely vary with some home DVD players and DVD-ROM drives. Note that DVD-RAM cannot read or write to 2.6GB Single Sided/5.2 Double Sided-Version 1.0 Media. No support for DVD RAM.

 6 With Blu-Ray, certain disc, digital connection, compatibility and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. In order for some Blu-ray titles to play, they
- may require a DVI or HDMI digital connection and your display may require HDCP support. HD-DVD movies cannot be played on this Desktop PC.

 Bror systems installed with Microsoft Windows 7 (Ultimate, Enterprise or Professional), the maximum accessible system memory is 192 GB. For systems installed with Microsoft Windows 8.x (Enterprise or Prof.), the maximum accessible system memory is 192 GB. For systems installed with Microsoft Windows 8.x (Enterprise or Prof.)
- system memory is 512 GB.
- 9 Wireless access point and Internet access required. Availability of publis wireless access points limited. The specifications for the 802.11ac WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ac WLAN devices
- 10 Optional or add-on feature.

 11 Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit www.epeat.net for more information.
- External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.
 HP Remote Graphics Software requires a Windows, Linux®, or Mac®OS X 10.10 and newer operating system and network access.
 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. 16 Each bay is configurable to 2.5" or 3.5".

- 17 NVIDIA® Quadro® SYNC II sold separately 18 HP Keyed Cable Lock Kit is available only as an aftermarket option. 19 HP 10GBASE-T Dual NIC Z6/8 G4 is sold separately or as an optional feature.
- ²⁰ The 3TB memory configuration requires 128GB DIMMs which are supported but no longer sold by HP.
 ²¹ Windows 11 Pro andWindows 10 Pro is preinstalled. Windows 7 media is only available upon request from HP Customer Support. You may only use one version of the Windows software at a time. Switching between versions will require
- you to uninstall one version and install the other version. You must back up all data (files, photos, etc.) before uninstalling and installing operating systems to avoid loss of your data.

 22 NOTE: In accordance with Microsoft's support policy, HP does not support the Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any Windows 8 or Windows 7 drivers on http://www.support.hp.com
- Note: For detailed Linux® OS/hardware support information, see: http://www.hp.com/support/linux_hardware_matrix and lintel® I350-T4 dual4-port GbE NIC is sold separately or as an optional feature.
- 25 Not all features are available in all editions or versions of Ubuntu. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS to take full advantage of Ubuntu functionality. Ubuntu may be automatically updated. ISP fees may apply and additional requirements may apply over time for updates.

Sign up for updates hp.com/go/getupdated

Copyright © 2018 HP Development Company, L.P. The only warranties for HP products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel, Xeon, Thunderbolt and Intel vPro are trademarks of Intel Corporation or isubsidiaries in the U.S. and/or other countries. Bluetooth is a trademark of its proprietor and used by HP Inc. under license. USB Type-C™ and USB-C™ are trademarks of USB Implementers Forum. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. DisplayPort™ and the DisplayPort ogo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. AMD and Radeon are trademarks of Advanced Micro Devices, Inc. NVIDIA. The NVIDIA logo and Quadro are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Red Hat(R) is a registered trademark of Red Hat, Inc. in the United States and other countries. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries. All other trademarks are the property of their respective

