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 10 Pro for husiness

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 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 PCIe Gen3 slots and get additional expandability supporting up to 4 PCIe 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.
- 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.

HP Z8 G4 Workstation Specifications Table







*Product image may differ from actual pr	oduct
Available Operating Systems	Windows 10 Pro for Workstations 64 - HP recommends Windows 10 Pro ^{1,21} ,22 Ubuntu 2.04 LTS ² HP Installer K1 for Linux ^{2,3} Red Hat "Enterprise Linux ^{2,3} Ubuntu 2.04 LTS, 64 bit version, HP Linux-ready, Red Hat "Enterprise Linux ² " Ubuntu 2.04 LTS, 64 bit version, HP Linux-ready, Red Hat "Enterprise Linux" drop-in-box, 1 year entitlement
Processor family	Intel® Yeon® Solabile processor
Available Processors ^{2,3}	Intel® Name Share 42 (100 E.4.0 Gibt base frequency, up to 3.2 Gibt with Intel® flunds boots ferroriously, 13.5 Med. 1 cardw. 15 Corest Intel® Name Share 42 (100 E.4.0 Gibt base frequency, up to 3.5 Gibt with Intel® flunds boots ferroriously, 15.5 Med. 1 cardw. 15 Corest Intel® Name Share 42 (100 E.4.0 Gibt base frequency, up to 3.5 Gibt with Intel® flunds boots ferroriously, 15.6 Med. 1 cardw. 16 Corest Intel® Name Share 42 (100 E.4.0 Gibt base frequency, up to 3.5 Gibt with Intel® flunds boots ferroriously, 15.6 Med. 1 cardw. 16 Corest Intel® Name Share 42 (100 E.4.0 Gibt base frequency, up to 3.5 Gibt with Intel® flunds boots ferroriously, 15.6 Med. 1 cardw. 16 Corest Intel® Name Share 42 (10.1 Gibt base frequency, up to 3.2 Gibt with Intel® flunds boots ferroriously, 22 Med. 1 cardw. 16 Corest Intel® Name Share 42 (10.1 Gibt base frequency, up to 3.2 Gibt with Intel® flunds boots ferroriously, 22 Med. 1 cardw. 16 Corest Intel® Name Share 42 (10.1 Gibt base frequency, up to 3.2 Gibt with Intel® flunds boots ferroriously, 22 Med. 1 cardw. 16 Corest Intel® Name Share 42 (10.1 Gibt base frequency, up to 3.0 Gibt with Intel® flunds boots ferroriously, 22 Med. 1 cardw. 16 Corest Intel® Name Share 42 (10.1 Gibt base frequency, up to 3.0 Gibt with Intel® flunds boots ferroriously, 22 Med. 1 cardw. 16 Corest Intel® Name Share 42 (10.1 Gibt base frequency, up to 3.0 Gibt with Intel® flunds boots ferroriously, 23 Med. 1 cardw. 16 Corest Intel® Name Share 42 (10.1 Gibt base frequency, up to 3.0 Gibt base fluores, 10.1 Gibt b
Chipset	INTER* VICEO TO DESCRIPT CAT USE THE REPORT OF USE AT USE WITH WHITH THE THE DESCRIPT CATE OF USE AT USE AT USE AT WHITH THE THE DESCRIPT CATE OF USE AT USE AT USE AT WHITH THE THE DESCRIPT CATE OF USE AT
Maximum memory	3 TB 00R4-2666 ECC S0RAM: 1.5 TB 00R4-2933 ECC S0RAM: ²⁰
Memory slots	Transfer rates up to 2933MT/s. 24 0MM with 2 processors
Internal storage	300.6 SS-K 15000 mm ¹⁴ 500.6 SS-K 15000 mm ¹⁴ 1 Titu yu to 18 12 SS-K 17200 ymm ¹⁴ 1 Titu yu to 18 12 SS-K 17200 ymm ¹⁴ 255.6 duy to 2 Tit SS-K 17200 ymm ¹⁴ 240.6 Uu to 2 Tit SS-K 17200 ymm ¹⁴ 240.6 Uu to 10 Dit SS-K 17200 ymm ¹⁴ 240.6 Uu to 10 Dit SS-K 17200 ymm ¹⁴ 240.6 Uu to 10 SS-K 17200 ymm ¹⁴ 255.6 Guy to 1 Tit HP-Z Tuto Dinne PCLe* NINNe** SSD* 255.6 Guy to 1 Tit HP-Z Tuto Dinne PCLe* NINNe** SSD XS* 255.6 Guy to 15 ZS Lide 92 Tuto Dinne PCLe* NINNe** SSD XS XS* 255.6 Guy to 15 ZS Lide 92 Tuto Dinne PCLe* NINNe** SSD XS XS* 255.6 Guy to 15 ZS Lide 92 Tuto Dinne PCLe* NINNe** SSD XS XS* 255.6 Guy to 15 ZS Lide 92 Tuto Dinne PCLe* NINNe** SSD XS* 255.6 Guy to 15 ZS Lide 92 Tuto Dinne PCLe* NINNe** SSD XS* 255.6 Guy to 15 ZS Lide 92 Tuto Dinne PCLe* NINNe** SSD XS*
Additional storage	HP SD 4 Media Card Reader (optional)
Optical drive ^{5,6}	HP Sim DVD-ROM; HP Sim Blu-ray Writer; HP Sim DVD-Writer
Available Graphics	Entry 3D: NVIDIA* Quadro* PADOL IZ GE GODRS dedicated: NVIDIA* Quadro* PAZOL IZ GE GODRS dedicated: AVIDIA* Quadro* PAZOL IZ GE GODRS dedicated: NVIDIA* Qua
Expansion slots	2 PGe vs.; 3 PGe vs.; 4 PGe vs. 6 (1 PGe vs.) 6 The Case has rear bulkhead access and 2 PGe vs. are internal access only. Stot 1: Transforms to PGe vs. when 2nd CPU is installed. Stots 3 and 6: are available only when 2nd processor is installed. PGe vs. 16 - Available only whe
Ports and Connectors	Front: Theadest connector, 14/8 3.1 (1 charging) Rear 51/8 3.1 (sen 1; 24-45 (1 DEA); 1 audie-1; audie-0 uit; 1 PS/2 knyboard port; 1 serial (Premium front includes: 1 headset, 2 USB 3.1 Gen 1 (1 charging), 2 USB 3.1 Gen 2 Type-C**.)
Available Keyboards ¹⁰	HP Wireless Business Slim Keyboard and Mouse Combot; HP USB Business Slim Keyboard; USB Premium wired keyboard; USB Smart Card (COID) keyboard
Available Pointing Devices ¹⁰ Communications ^{18,249}	3Donnewion CAMbouse; PI DES Optical Mouse; PIP DES Paradened Mouse HP dual-port 10GBase-T NC Integrated Intel* 1/9-1 MP DIe* GoE Integrated Intel* 1/9-1 MP DIe* GoE Integrated Intel* 2/22 PDIe* GoE Intel* 10 GES EST-S Patrassewe Intel* 2/0-1 PDIe* GoE Intel* 859-1 A dual-port GOE NIC
Drive Bays	Intel® XSS-0-72 dail-port GEG NC Intel® XI Common Telephone (Intel® XI Common XI Association For
Software	HP Performance Advisor, HP Remote Gaphics Software RIGS
Security management ^{14,15,18}	HP Sure Start Gens). Secure authentication; Kensington lock slot; Full volume encryption; HP Keyed Cable Lock Rt; TPM 2.D certified; HP Secure Ense
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	85×21.7×17.5in;21.59×55.12×44.45 cm
Weight	Starting at 49.4 lb; Starting at 22.4 kg (Seart weight depends on configuration.)
Energy efficiency compliance ¹¹	ENERGY STAR® certified and EPEAT® Sliver registered configurations available; ENERGY STAR® certified and EPEAT® 2019 registered where applicable. EPEAT® registration varies by country. See www.expext.net for registration status by country.
Sustainable impact specifications 12	Low halogen
Compatible displays	All H9 2 Displays and H9 DreamColor Displays are supported.
Warranty	Protected by HP Services, including a 3 years parts, 3 years labor, and 3 years orsite service (3-3-3) standard limited warranty. (entain restrictions, 24/7 operation will not void the HP warranty.

HP Z8 G4 Workstation

Accessories and services (not included)

HP Z32 31.5-inch 4K UHD Display



Experience extraordinary, precise color and see more of your projects at one time on a display with stunning $4K^1$ resolution. **Product number: 1AA81A8**

HP Z24nf G2 23.8-inch Display



Be a productive powerhouse with the sleek HP Z24nf G2 23.8-inch Display. This virtually seamless Full HD display is factory-tested for reliability and longevity with integrated color calibration, uninterrupted multi-screen tiling, and expansive device connections.

Product number: 1JS07A8

HP 5 year Next Business Day Onsite HW Support w/Defective Media **Retention for Workstations**



When hardware issues come up, the sooner you can get running again, the better. Have expertise at the ready with HP Hardware Next Business Day¹ Onsite Service with Defective Media Retention, and vastly improve your product uptime. With high-quality remote assistance or convenient onsite support available the next business day, help is there when you need it so you can get back to work. **Product number: UE344E**

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 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 Multitore 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 and/or n
- Intel vPro technology is dependent on 3 rd party software providers. Microsoft Windows required.

 4 For hard drives and solid state drives, 1 GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB of system disk 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 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® 1350-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 owners.

