HP Z4 G4 Workstation



HP's most popular workstation just got better. Perfect for engineering, the Z4 delivers mainstream performance for a wide spectrum of applications. With server-grade processing and a full set of components you get everything you need, nothing more.

HP recommends Windows 10 Pro.



Feature-rich functionality

The Z4 is ahead of its time with more standard features than any other single processor HP workstation. With multiple configuration options, you can choose the perfect blend of components that meet your performance requirements.

All the power without the noise

Next-generation acoustic design delivers quiet performance. A high frequency processor with a multi-core count is fully capable of handling the demands of 3D CAD and rendering software, so you can visualize your idea anytime during the design process.

The world's most secure workstations 2

Advanced security features come standard on every Z4. Rest assured your device, identity and data are safe with security software like HP Client Security Suite³ and HP Sure Start, 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
- Run demanding professional apps with the newest generation Intel® Xeon® processors with up to 10 cores for powerful performance and productivity.⁴
- Get serious about graphics and reach peak productivity with access to a breadth of NVIDIA® and AMD professional graphics from entry to high-end 3D.5
- Install pro-grade storage hardware and elevate your storage-bound apps without sacrificing standard PCIe slots.
- The simply stunning design features front and rear handles, so you can easily relocate your system.
- Save space within your office layout with a 10% smaller chassis than the previous generation.
- Work stress-free knowing your BIOS has not been compromised. HP Sure Start automatically detects intrusions in real-time, notifies you, and restores BIOS.
- Multiple high-speed network connections are easy and speedy with dual embedded 1GbE LAN ports and with Thunderbolt™ 3 technology for fast data transfers.⁷
- The optional dual front I/O USB 3.1 G2 Type C[™] module lets you transfer data to devices using modern connection technology at higher data rates.⁶
- Optional self-encryption drives thwart outside access so your valuable IP won't fall into the wrong hands. 5

HP Z4 G4 Workstation Specifications Table







Operating System	Windows 10 Pro for Workstations ^{1, 20, 21} HP Installer Kit for Linux® Red Hat® Enterprise Linux®
	(HP Linux® Installer Kit includes drivers for 64-bit versions of Red Hat® Enterprise Linux® 6.7 and 7, SUSE Linux® Enterprise Desktop 11 and Ubuntu 14.04. Red
	Hat® Enterprise Linux® (1-year paper license only) is available as a second operating system.)
Processor Family	Intel® Xeon® W processor
Processors ^{2,3}	Intel® Xeon® W2155 (3.3 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 13.75 MB cache, 10 cores) Intel® Xeon® W2145 (3.7 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 11 MB cache, 8 cores) Intel® Xeon® W2133 (3.6 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 8.25 MB cache, 6 cores) Intel® Xeon® W2125 (4 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 8.25 MB cache, 4 cores) Intel® Xeon® W2135 (3.7 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 8.25 MB cache, 6 cores) Intel® Xeon® W2133 (3.6 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 8.25 MB cache, 4 cores) Intel® Xeon® W2104 (3.2 GHz, 8.25 MB cache, 4 cores) Intel® Xeon® W2102 (2.9 GHz, 8.25 MB cache, 4 cores)
Chipset	Intel® C422
Maximum Memory	256 GB DDR4-2666 ECC SDRAM ⁸ (Transfer rates up to 2666 MT/s.)
Memory Slots	8 DIMM
Drive Controllers	Integrated SATA 6.0 Gb/s; Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, 5, and 10)
Internal Storage	300 GB SAS (15000 rpm) ⁴ 500 GB up to 2 TB SATA (7200 rpm) ⁴ 500 GB SATA SED (7200 rpm) ⁴ 1 TB up to 4 TB 7200 rpm SATA Enterprise ⁴ 256 GB up to 2 TB SATA SSD ⁴ 256 GB up to 512 GB SATA SED Opal 2 SSD ⁴ 240 GB up to 480 GB SATA Enterprise SSD ⁴ 256 GB up to 1 TB HP Z Turbo Drive PCle® SSD M.2 ⁴ 256 GB up to 512 GB HP Z Turbo Drive PCle® SSD M.2 ⁴ 256 GB up to 512 GB HP Z Turbo Drive PCle® SSD M.2 ⁴ 256 GB up to 4 TB HP Z Turbo Drive PCle® SSD M.2 ⁴
Optical Storage	HP Slim DVD-ROM; HP Slim Blu-ray Writer; HP Slim DVD-Writer 5.6
Additional Storage	HP SD 4 Media Card Reader (optional)
Available Graphics	Entry 3D: NVIDIA® Quadro® P400 (2 GB GDDR5 dedicated); NVIDIA® Quadro® P600 (2 GB GDDR5 dedicated); AMD FirePro™ W2100 Graphics (2 GB DDR3 dedicated) Mid-range 3D: NVIDIA® Quadro® P1000 (4 GB GDDR5 dedicated); NVIDIA® Quadro® P2000 (5 GB GDDR5 dedicated); AMD Radeon™ Pro WX 3100 Graphics (4 GB GDDR5 dedicated); AMD Radeon™ Pro WX 4100 Graphics (4 GB GDDR5 dedicated) 17 High-end 3D: NVIDIA® Quadro® P4000 (8 GB GDDR5 dedicated); AMD Radeon™ Pro WX 7100 Graphics (8 GB GDDR5 dedicated) Ultra High-end 3D: NVIDIA® Quadro® P5000 (16 GB GDDR5X dedicated); NVIDIA® Quadro® P6000 (24 GB GDDR5X dedicated) 7
Audio	Integrated Realtek HD ALC221
Networking	LAN: Integrated Intel® I219-LM PCIe® GbE; Integrated Intel® I210-AT PCIe® GbE; Intel® I350-T2 dual-port GbE NIC; Intel® I350-T4 dual-port GbE NIC; Intel® L210-T1 PCIe® GbE; Intel® X550-T2 dual-port GbE NIC; Intel® X710-DA2 dual-port GbE NIC; Intel® 10 GbE SFP+ SR transceiver WLAN: Intel® Dual Band Wireless-AC 8265 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 4.2 Combo, non-vPro™
Expansion Slots	2 PCle 3 x4; 2 M.2 PCle 3 x4; 1 PCle x8; 2 PCle x16 (Slots 2 and 4: PCH with open-ended connector. Slot 5: CPU with open-ended connector. M.2 Slots: CPU up to 80 mm storage devices.)
Ports and Connectors	Front: 1 headset; 4 USB 3.1 (1 charging); 2 USB 3.1 Type-C™ Rear: 6 USB 3.1 Gen 1; 2 RJ-45 (1 GbE); 1 audio line out; 1 audio line in; 1 PS/2 mouse port; 1 PS/2 keyboard port; 1 serial port (optional) (Premium front includes: 1 headset, 2 USB 3.1 Gen1 (1 charging), 2 USB 3.1 Gen 2 Type-C™, SD Media Card Reader.)

Drive Bays (Internal)	Two 2.5" or 3.5"16
Drive Bays (External)	Two 5.25"
Input Device	HP PS/2 Business Slim Keyboard; HP USB Business Slim Keyboard; USB Premium wired keyboard; USB Smart Card (CCID) keyboard ¹⁰ 3Dconnexion CADMouse; HP USB Optical Mouse; HP PS/2 Mouse; HP USB Hardened Mouse ¹⁰
Software	HP Remote Graphics Software (RGS); HP Performance Advisor 13
Security	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
Power	1000 W internal power supply, up to 90% efficiency, active PFC; 465 W internal power supply, up to 90% efficiency, active PFC; 750 W internal power supply, up to 90% efficiency, active PFC ¹⁹
Dimensions (W x D x H)	15.2 x 6.65 x 17.5 in 38.6 x 16.9 x 44.5 cm
Weight	Starting at 22.4 lb Starting at 10.2 kg
Energy Efficiency Compliance	ENERGY STAR® certified and EPEAT® Gold registered configurations available 11
Environmental Certification	Low halogen ¹²
Compatible Displays	All HP Z Displays and HP DreamColor Displays are supported. For more information see www.hp.com/go/zdisplays.
Warranty	Protected by HP global standard limited warranty of 3 years parts, labor and on-site service. Terms and conditions may vary by country. Certain restrictions and exclusions apply. 24/7 operation will not void the HP warranty.

HP Z4 G4 Workstation

Recommended accessories and services (not included)

HP Z38c 37.5-inch Curved Display



Completely immerse yourself in the expansive elegance of the HP Z38c Curved Display. Form meets function with crisp, panoramic views so you can stay focused on your work.

Product number: Z4W65A4

HP Z Turbo Drive Quad Pro 2x512GB PCle SSD



Power through your largest data challenges and get amazing performance with the HP Z Turbo Drive Quad Pro, which integrates up to four super-fast HP Z Turbo Drive G2 modules¹ into one PCIe x16 card.

Product number: N2M99AA

NVIDIA Quadro P5000 (16GB) Graphics Card



Work with large models and rendering tasks and complex simulations and add more life-like VR experiences to your workflow today while preparing for the challenges of tomorrow with the NVIDIA® Quadro® P5000 workstation graphics card, powered by NVIDIA Pascal™ GPU technology.

Product number: Z0B13AA

AMD Radeon Pro WX 7100 8GB Graphics Card



Meet your demanding Design & Manufacturing and Media & Entertainment VR and immersive computing workflows head on with the AMD Radeon™ Pro WX 7100, a single slot form factor card based on AMD's new Polaris architecture.

Product number: Z0B14AA

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 HP's unique and comprehensive security capabilities at no additional cost and HP's Manageability Integration Kit's management of every aspect of a PC including hardware, BIOS and software management using Microsoft System Center Configuration Manager among desktop workstation vendors as of June 2017 on HP Desktop Workstation with 7th Gen Intel[®] Processors.

3 HP Client Security Suite features vary by platform.

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 is not a measurement of higher performance.

⁵ Sold separately or as an optional feature.

⁶ HP Z Premium Front I/O 2xUSB-A 2xUSB-C is sold separately or as an optional feature.

⁷ Optional and available the first half of 2018.

Screen image courtesy of Chris McLennan

Screen image courtesy of Renault Sport Racing

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 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 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.
- 7 HP VR Ready Configurations available.
- ⁸ For 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 Pro), the maximum accessible 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 EPEAT® registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country. Search keyword generator on HP's 3rd party option store for solar generator accessories at http://www.hp.com/qo/options www.hp.com/qo/options
- 12 External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.
- ¹³ HP Remote Graphics Software requires a Windows, Linux®, or Mac®OS X 10.10 and newer operating system and network access.
- 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.
- ¹⁶ Each bay is configurable to 2.5" or 3.5".
- ¹⁷ The AMD Radeon™ Pro WX 4100 Graphics is available only as an aftermarket option.
- ¹⁸ HP Keyed Cable Lock Kit is available only as an aftermarket option.
- 19 Available the first half of 2018.
- ²⁰ 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 operating systems to avoid loss of your data.
- 21 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.

Sign up for updates hp.com/go/getupdated

Learn more at hp.com

Copyright © 2017 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 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™ logo 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. All other trademarks are the property of their respective owners. 4AA7-0828ENUC, August 2017

