HP Z6 G4 Workstation

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 10 Pro.

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 384 GB of memory. Experience seamless performance during graphics-intensive work, such as visual effects and design visualization.

The world's most secure workstations [2]
- 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[3] 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 or Linux® operating systems.
- 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.
- Get serious about graphics and reach peak productivity with access to a breadth of NVIDIA® and AMD professional graphics from entry to ultra 3D.
- Install the fastest professional grade storage hardware around, unlocking performance for storage-bound applications without sacrificing standard PCIe slots.
- The Z6 workstation's sleek, iconic design doesn't compromise on quiet, reliable performance.
- HP SureStart automatically detects intrusions in real-time, notifies you, and restores the BIOS you use, so you can breathe easier.
- Create two network connections without the added cost of a PCIe NIC with dual embedded 1GbE LAN ports which come standard.
- 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.
- The optional dual 10 GbE module allows you to share big data files with 10x the bandwidth of standard office networking.
- Optional self-encryption drives thwart outside access so your valuable IP won't fall into the wrong hands.

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Specifications Table

Operating System	Windows 10 Pro for Workstations[1] HP Installer Kit for Linux® Red Hat® Enterprise Linux®
Processor Family	Intel® Xeon® Scalable processor
Processors[2,3]	Intel® Xeon® Platinum 8180 (2.5 GHz base frequency, up to 3.8 GHz with Intel® Turbo Boost Technology, 38.5 MB cache, 28 cores); Intel® Xeon® Platinum 8160 (2.1 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 33 MB cache, 24 cores); Intel® Xeon® Gold 6152 (2.1 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 30.25 MB cache, 22 cores); Intel® Xeon® Gold 6154 (3 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 24.75 MB cache, 18 cores); Intel® Xeon® Gold 6148 (2.4 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 27.5 MB cache, 20 cores); Intel® Xeon® Gold 6142 (2.6 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 22 MB cache, 16 cores); Intel® Xeon® Gold 6136 (3 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 24.75 MB cache, 12 cores); Intel® Xeon® Gold 6140 (2.3 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 24.75 MB cache, 18 cores); Intel® Xeon® Gold 6134 (3.2 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 24.75 MB cache, 8 cores); Intel® Xeon® Gold 6132 (2.6 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 19.25 MB cache, 14 cores); Intel® Xeon® Gold 6130 (2.1 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 22 MB cache, 16 cores); Intel® Xeon® Gold 6128 (3.4 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 19.25 MB cache, 6 cores); Intel® Xeon® Gold 5120 (2.2 GHz base frequency, up to 3.2 GHz with Intel® Turbo Boost Technology, 19.25 MB cache, 14 cores); Intel® Xeon® Gold 5118 (2.3 GHz base frequency, up to 3.2 GHz with Intel® Turbo Boost Technology, 16.5 MB cache, 12 cores); Intel® Xeon® Gold 5122 (3.6 GHz base frequency, up to 3.7 GHz with Intel® Turbo Boost Technology, 16.5 MB cache, 4 cores); Intel® Xeon® Silver 4116 (2.1 GHz base frequency, up to 3 GHz with Intel® Turbo Boost Technology, 16.5 MB cache, 12 cores); Intel® Xeon® Silver 4114 (2.2 GHz base frequency, up to 3 GHz with Intel® Turbo Boost Technology, 13.75 MB cache, 10 cores); Intel® Xeon® Silver 4112 (2.6 GHz base frequency, up to 3 GHz with Intel® Turbo Boost Technology, 8.25 MB cache, 4 cores); Intel® Xeon® Silver 4108 (1.8 GHz base frequency, up to 3 GHz with Intel® Turbo Boost Technology, 11 MB cache, 8 cores); Intel® Xeon® Bronze 3106 (1.7 GHz, 11 MB cache, 8 cores); Intel® Xeon® Bronze 3104 (1.7 GHz, 8.25 MB cache, 6 cores)
Chipset	Intel® C622
Maximum Memory	Up to 384 GB DDR4-2666 ECC SDRAM Standard memory note: Transfer rates up to 2666 MT/s.
Memory Slots	12 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	up to 300 GB SAS (15000 rpm)[4] 500 GB up to 2 TB SATA (7200 rpm)[4] up to 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]
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)
Drive Bays (Internal)	Two 2.5" or 3.5"[16]
Drive Bays (External)	Two 5.25"[16]
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]
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 and Connectors	Front: 1 headset connector; 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.
Communications	LAN: Integrated Intel® I219-LM PCIe® GbE; Integrated Intel® X722 PCIe® GbE; Intel® I350-T2 dual-port GbE NIC; Intel® I350-T4 dual-port GbE NIC; Intel® I210-T1 PCIe® GbE; Intel® X550-T2 dual-port GbE NIC; Intel® X710-DA2 dual-port GbE NIC; Intel® 10 GbE SFP+ SR transceiver; HP dual-port 10GBase-T NIC[19] WLAN: Intel® Dual Band Wireless-AC 8265 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 4.2 Combo, non-vPro™[9]
Audio	Realtek HD ALC221
Power	1000 W internal power supply, up to 90% efficiency, active PFC; 700 W internal power supply, up to 90% efficiency, active PFC
Input Device	HP Wireless Business Slim Keyboard and Mouse Combo; 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]
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]
Software	HP Remote Graphics Software (RGS); HP Performance Advisor
Dimensions	16.9 x 46.5 x 44.5 cm
Weight	Starting at 13.1 kg Exact weight depends on configuration.
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	3 year (3-3-3) limited warranty and service offering includes 3 years of parts, labor and on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply.

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Accessories and services (not included)

NVIDIA Quadro P4000 (8GB) Graphics Card

Experience lifelike VR workflows with large models and renders and complex visual effects and simulations on up to three 5K displays with the NVIDIA® Quadro® P4000, powered by NVIDIA Pascal™ GPU technology.
Product number: 1ME40AA

HP Z27n 27-inch Narrow Bezel IPS Display

Enable a virtually borderless panorama of multiple displays[1] with the HP Z27n Narrow Bezel IPS Display, which has an edge-to-edge screen for maximum quad HD impact, out-of-the-box factory color calibration, and flexible connectivity for all of your devices.
Product number: K7C09A4

3Dconnexion CadMouse

Simplify scroll, click, and zoom functions and comfortably drive your CAD projects with the 3Dconnexion CADMouse.
Product number: M5C35AA

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

HP 5 year Next Business Day Onsite Hardware Support for Workstations

Receive 5 years of next business day onsite HW Support from an HP-qualified technician for your computing device, if the issue cannot be solved remotely.
Product number: U7944E

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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] HP dual-port 10GBase-T NIC is sold separately or as an optional feature.

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.

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[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/go/options www.hp.com/go/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] HP dual-port 10GBase-T NIC is sold separately or as an optional feature.

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