Datasheet

HP Z440 Workstation



Take your business to the next level of performance, expandability, and no compromise reliability in one complete package. Featuring a perfect mix of HP Z DNA in a performance workstation package with up to 8 discrete processor cores, up to 128 GB of RAM, and multiple storage and PCIe configuration options.

HP recommends Windows 10 Pro.

- Windows 10 Pro¹
- Intel[®] Xeon[™] processors²





Get the job done fast

Cross items off your to-do list fast. Achieve massive computational performance with a single processor personal workstation delivering support for up to 8 cores of processing power. Add in powerful graphics and performance features like optional ThunderboltTM 2³, HP Z Turbo Drive⁴, and HP Remote Graphics Software,⁴ and you get a world-class workstation experience that never slows you down.

Customize it to grow with you

When your job requires more, the HP Z440 Workstation, with its sleek 4U form factor, tool-less design, and built in handles make it simple to expand. Easily configure memory, storage, graphics, and more to suit your needs.

Position for the future

Protect your investment and make downtime a thing of the past. Get no-compromise reliability and a standard 3/3/3 limited warranty from the HP Z440 Workstation.

Featuring:

- Achieve the performance you need with next generation Intel[®] Xeon[®] processors for up to 8 processor cores in one system.²
- Get serious about graphics and reach peak productivity with access to a breadth of AMD professional graphics from entry to high-end 3D.⁴
- Take productivity up a notch with the ability to do more thanks to NVIDIA® professional graphics cards in 2D or 3D. $^{\scriptscriptstyle 4}$
- Maximize your time and increase your capabilities with USB and SATA ports, plus lightning-fast data transfers using optional Thunderbolt™ 2 technology.³
- A brand new tool-free chassis boasts low acoustics, single integrated Gb Ethernet and more.
- Reduce boot up, calculation, and graphics response and revolutionize how your HP Z440 handles large files with the HP Z Turbo Drive, a remarkably fast and innovative storage solution.
- You'll never run out of juice with two power supply options including a 525W option and a 700W option with two power cables for high-power professional graphics.
- Take multitasking to a new level with support for up to eight displays.⁵
- Optimize this HP Z440 for peak performance. HP Performance Advisor⁶ configures your system with updated settings and drivers to help maximize performance.

HP recommends Windows 10 Pro.

HP Z440 Workstation Specifications Table





Form Factor	Tower
Operating System	Windows 10 Pro 64 for Workstations – HP recommends Windows 10 Pro. ¹ Windows 10 Home 64 ¹ Windows 8.1 Pro 64 ² Windows 7 Professional 64 (available through downgrade rights from Windows 10 Pro 64) ³ Windows 7 Professional 64 ² HP Installer Kit for 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® E5 1600 v3 processor; Intel® Xeon® E5 2600 v3 processor; Intel® Xeon® E5 2600 v4 processor; Intel® Xeon® E5 1600 v4 processor
Processors	Intel® Xeon® E5-2637 v4 (3.5 GHz, 15 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-2623 v4 (2.6 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1660 v4 (3.4 GHz, 20 MB cache, 8 cores, Intel® vPro [™]) Intel® Xeon® E5-1660 v4 (3.2 GHz, 20 MB cache, 8 cores, Intel® vPro [™]) Intel® Xeon® E5-1650 v4 (3.6 GHz, 15 MB cache, 6 cores, Intel® vPro [™]) Intel® Xeon® E5-1660 v4 (3.7 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1620 v4 (3.5 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1607 v4 (3.1 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1607 v4 (3.6 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1603 v4 (2.8 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1603 v4 (2.8 GHz, 10 MB cache, 8 cores, Intel® vPro [™]) Intel® Xeon® E5-1603 v3 (2.4 GHz, 20 MB cache, 8 cores, Intel® vPro [™]) Intel® Xeon® E5-1660 v3 (3.6 GHz, 20 MB cache, 8 cores, Intel® vPro [™]) Intel® Xeon® E5-1660 v3 (3.7 GHz, 20 MB cache, 8 cores, Intel® vPro [™]) Intel® Xeon® E5-1660 v3 (3.7 GHz, 20 MB cache, 8 cores, Intel® vPro [™]) Intel® Xeon® E5-1660 v3 (3.7 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1660 v3 (3.7 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1630 v3 (3.7 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1630 v3 (3.7 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1600 v3 (3.7 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1600 v3 (3.6 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1600 v3 (3.6 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1600 v3 (3.6 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1600 v3 (3.1 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1600 v3 (3.1 GHz, 10 MB cache, 4 cores, Intel® vPro [™]) Intel® Xeon® E5-1600 v3 (3.2 GHz, 10 MB cache, 4 cores, Intel® vPro [™])
Chipset	Intel® C612
Maximum Memory	Up to 256 GB DDR4-2400 ECC registered SDRAM DDR4-2133 ECC Registered SDRAM (Transfer rates up to 2400 MT/s. Only registered memory is supported.)
Memory Slots	8 DIMM
Drive Controllers	Integrated SATA 6.0 Gb/s; LSI MegaRAID® 9270-8i SAS 6.0 Gb/s ROC RAID Card and iBBU09 Battery Backup Unit (optional); LSI 9217-4i4e 8-port SAS 6.0 Gb/s RAID (optional); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data, 1, and 10); Factory integrated RAID available for SATA/SAS drives (RAID 0, 0 Data)
Internal Storage	300 GB up to 600 GB SAS (15000 rpm) ⁶ 300 GB up to 1.2 TB SAS (10000 rpm) ⁶ 500 GB up to 4 TB SATA (7200 rpm) ⁶ 500 GB SATA SED (7200 rpm) ⁶ 128 GB up to 2 TB SATA SSD ⁶ 512 GB SATA SE SSD ⁶ 1 TB SATA SSHD (7200 rpm) ⁶ 256 GB up to 1 TB HP Z Turbo Drive G2 (PCIe SSD) ⁶ 256 GB up to 1 TB HP Z Turbo Drive G2 PCIe [®] SSD ⁶ 256 GB up to 512 GB HP Z Turbo Drive G2 (PCIe SED) ⁵ 512 GB up to 4 TB HP Z Turbo Drive G2 (PCIe SED) ⁵ 512 GB up to 4 TB HP Z Turbo Drive G2 (PCIe SED) ⁵ 512 GB up to 4 TB HP Z Turbo Drive G2 (PCIe SED) ⁵
Optical Storage	Slim SATA DVD-ROM; Slim SATA BDXL Blu-ray writer; Slim SATA DVD-Writer 7.8
Additional Storage	15-in-1 media card reader (optional); HP DX115 Removable HDD Frame/Carrier (optional)
Available Graphics	Professional 2D: NVIDIA® NVS™ 510 (2 GB); NVIDIA® NVS™ 315 (1 GB); NVIDIA® NVS™ 310 (1 GB) Entry 3D: AMD FirePro™ W2100 (2 GB); NVIDIA® Quadro® P600 (2 GB GDDR5 dedicated); NVIDIA® Quadro® P400 (2 GB GDDR5 dedicated); NVIDIA Quadro® K420 (2 GB); NVIDIA® Quadro® K620 (2 GB) Mid-range 3D: AMD FirePro™ W5100 (4 GB); AMD FirePro™ W4300 (4 GB); NVIDIA® Quadro® P2000 (5 GB); NVIDIA® Quadro® P1000 (4 GB); NVIDIA® Quadro® M2000 (4 GB); NVIDIA® Quadro® K2200 (4 GB); NVIDIA® Quadro® K1200 (4 GB) High-end 3D: AMD FirePro™ W7100 (8 GB); AMD Radeon™ Pro WX 7100 (8 GB); AMD Radeon™ Pro WX 4100 (4 GB); NVIDIA® Quadro® P6000 (24 GB); NVIDIA® Quadro® P5000 (16 GB); NVIDIA® Quadro® P4000 (8 GB); NVIDIA® Quadro® M6000 (24 GB); NVIDIA® Quadro® M5000 (8 GB); NVIDIA® Quadro® M4000 (8 GB) ¹⁴
Audio	Integrated Realtek HD ALC221
Networking	Integrated Intel® I218LM PCIe GbE; Intel® I210-T1 PCIe GbE (optional); HP X540-T2 10 GbE Dual Port Adapter (optional); HP X520 10 GbE Dual Port Adapter (optional); HP 10 GbE SFP+SR Transceiver (optional); HP 361T PCIe dual-port gigabit (optional); Intel® 7260 802.11a/b/g/n PCIe WLAN (optional); Intel® 8260 802.11a/b/g/n/ac with Bluetooth® 4.2 PCIe NIC (optional) °
Expansion Slots	2 PCIe Gen3 x16; 1 PCIe Gen3 x8 (open-ended); 1 PCIe Gen2 x4 (open-ended); 1 PCIe Gen2 x1 (open-ended); 1 PCI (Open-ended connector allows a greater bandwidth card to be installed physically into a lower bandwidth connector/slot.)
Ports and Connectors	Front: 4 USB 3.0; 1 microphone; 1 headset Back: 4 USB 3.0; 2 USB 2.0; 2 PS/2; 1 RJ-45; 1 audio line in; 1 audio line out Internal: 1 USB 2.0; 1 USB 3.0

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Drive Bays (Internal)	Two 3.5"
Drive Bays (External)	Two 5.25"; One slim ODD
Input Device	HP PS/2 Keyboard; HP USB Keyboard; HP USB SmartCard Keyboard; HP Wireless Keyboard and Mouse; HP PS/2 Business Slim Keyboard; HP USE Business Slim Keyboard; HP Wireless Business Slim Keyboard ¹⁰ HP PS/2 Mouse; HP USB Optical Mouse; HP USB 1000 dpi Laser Mouse; HP USB Optical 3-Button Mouse; HP SpacePilot Pro 3D USB Intelligent Controller; 3Dconnexion CADMouse; HP USB Hardened Mouse ¹⁰
Software	HP Performance Advisor; HP Remote Graphics Software (RGS) 7.2; CyberLink PowerDVD/Power2Go; Foxit PhantomPDF Express; Buy Office 13
Security	HP Solenoid Hood Lock & Hood Sensor; HP Business PC Security Lock Kit; TPM 1.2 certified; HP Keyed Cable Lock (optional) 10
Power	525 W 85% efficient, wide-ranging, active PFC; 700 W 90% efficient, wide-ranging, active PFC
Dimensions (W x D x H)	6.65 x 17.5 x 17 in 16.9 x 44.5 x 43.2 cm
Weight	24.3 lb 11 kg (Exact weight depends upon configuration.)
Energy Efficiency Compliance	ENERGY STAR® certified and EPEAT® 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 Services, including a 3 years parts, 3 years labor, and 3 years onsite service (3-3-3) standard limited warranty. Certain restrictions. 24/7 operation will not void the HP warranty.

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Recommended accessories and services (not included)



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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.microsoft.com. ² 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. 64-bit computing system required. Performance will

vary depending on your hardware and software configurations. Intel's numbering is not a measurement of higher performance. ³ Thunderbolt is an optional or after-market feature. Thunderbolt cable and Thunderbolt device (sold separately) must be compatible with Windows. To determine whether your device is Thunderbolt Certified for Windows, see

https://thunderbolttechnology.net/products. ⁴ Sold separately or as an optional feature.

⁵ Support for up to eight displays requires purchase of two graphics cards that support up to 4 displays simultaneously. Displays sold separately.
⁶ HP Performance Advisor requires Windows and Internet access.

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.microsoft.com.

² 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. See http://www.microsoft.com.

³ This system is preinstalled with Windows 7 Professional software and also comes with a license and media for Windows 10 Pro software. 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. 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 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.

⁶ 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

⁷ 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. ⁴⁹ 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.

⁹ Wireless cards are optional or add-on features and requires separately purchased wireless access point and internet service. Availability of public wireless access points limited.

¹⁰ Optional or add-on feature
¹¹ EPEAT® Gold 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 energy accessory at 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 Performance Advisor and HP Remote Graphics Software requires Windows and an internet connection.

14 HP VR Ready Configurations available.

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