Datasheet

HP Z1 G3 Workstation

We've once again pushed the innovation bar higher with dramatic, stylish updates to HP's Z1 Workstation All-in-One. Featuring a space-optimized, uncompromised, and fully featured design at a budget-conscious price point.

- Windows 10 Pro[1]
- Screen Size: 23.6" diagonal

Modernized for your 21st century workspace

Built for the modern office, this generation HP Z1 is 47% smaller and 51% lighter and features a 23.6" diagonal anti-glare UHD 4K display for the ultimate in visual clarity: ideal for smaller spaces, frequent moves, and a streamlined work experience.

True workstation-class performance

A complete workstation in a stylish all-in-one package: Intel® Xeon® quad-core[2], 64 GB ECC memory[3,4], NVIDIA® Quadro® graphics, and fast storage and I/O with dual HP Z Turbo Drives and Thunderbolt™[4]. This system screams performance.

Priced to match a traditional desktop and display.

With the HP Z1 G3 All-in-One Workstation we've matched the features of a comparably priced entry level desktop workstation and display.[5] Style, performance, features, and now budget friendly – truly an all in one experience!

Featuring

- Support your unique user needs with a choice of Windows 10 Pro[1], Windows 7, or Linux® operating systems.
- Dramatic and stylish new design that is smaller, thinner, lighter, and even more budget conscious.
- Crystal clear 23.6" diagonal anti-glare UHD 4K display for enhanced visual accuracy. And add up to two additional displays for increased productivity.
- Choose from 6th generation Intel® Core™[2] or Intel® Xeon® processor[2] options for powerful workstation-class processing technology.
- Take productivity up a notch with the ability to do more thanks to a choice of NVIDIA® Quadro® professional graphics.
- Tackle challenging tasks with confidence with support for up to 64 GB DDR4 2133 MHz ECC memory[3,4] for no compromise capacity, performance, and reliability.
- Revolutionize boot up, calculation, and response times for large files with dual PCIe HP Z Turbo Drives[6], HP's fast and innovative storage solution. And maximize your storage by adding up to two additional 2.5" SATA SSDs or HDDs.[3]
- Designed with multiple ports to quickly and easily transfer data and connect devices including side access dual Thunderbolt™ 3 with USB 3.1, USB charging port, media card reader, DisplayPort, and more.
- Tool-less rear access for easy upgrades and maintenance.

HP Z1 G3 Workstation Specifications Table

Form Factor	All-in-One
Operating System	Windows 10 Pro 64 [1] Windows 7 Professional 64 (available through downgrade rights from Windows 10 Pro 64) [2] HP Linux®-ready
Processor Family	Intel® Xeon® E3 processor; Intel® Core™ i7 processor; Intel® Core™ i5 processor; Intel® Core™ i3 processor [3,11]
Processors[3,11]	Intel® Xeon® E3-1270 v5 (3.6 GHz, up to 4 GHz with Intel Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Xeon® E3-1245 v5 with Intel HD Graphics P530 (3.5 GHz, up to 3.9 GHz with Intel Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Xeon® E3-1225 v5 with Intel HD Graphics P530 (3.3 GHz, up to 3.7 GHz with Intel Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Core™ i7-6700 with Intel HD Graphics 530 (3.4 GHz, up to 4 GHz with Intel Turbo Boost, 8 MB cache, 4 cores) Intel® Core™ i5-6500 with Intel HD Graphics 530 (3.2 GHz, up to 3.6 GHz with Intel Turbo Boost, 6 MB cache, 4 cores) Intel® Core™ i3-6100 with Intel HD Graphics 530 (3.7 GHz, 3 MB cache, 2 cores)
Chipset	Intel® C236
Maximum Memory	64 GB ECC DDR4-2133 SDRAM or 64 GB non-ECC Unbuffered DDR4-2133 SDRAM (Transfer rates up to 2133 MT/s)
Memory Slots	4 SODIMM
Drive Controllers	Integrated RAID 0, 1 on motherboard for SATA drives
Internal Storage	500 GB up to 1 TB SATA (7200 rpm) [4] 256 GB up to 1 TB SATA SSD [4] 256 GB SATA SED SSD [4] 256 GB up to 1 TB HP Z Turbo Drive G2 (NVMe PCIe SSD) [4]
Optical Storage	Ultra-slim external DVD-RW drive (optional) [5]
Available Graphics	Integrated: Intel® HD Graphics 530; Intel® HD Graphics P530 [6] Entry 3D: NVIDIA® Quadro® M1000M (2 GB) Mid-range 3D: NVIDIA® Quadro® M2000M (4 GB) [12] (If a discrete graphics card is installed, Intel integrated graphics is disabled. All discrete graphics cards are PCIe.)
Audio	DTS Studio Sound™ with stereo speakers
Networking	LAN: Integrated Intel I219LM PCIe Gigabit controller WLAN: Intel® 8260 802.11ac wireless with Bluetooth® 4.2 (optional)
Expansion Slots	1 MXM; 3 M.2 (MXM slot is dedicated for graphics. 2 M.2 slots support module types 2242, 2260, 2280-M H4.2. 1 M.2 slot supports module type 3030-E H4.2 for WLAN.)
Display	23.6" diagonal IPS LED backlit widescreen LCD (3840 x 2160)
Ports and Connectors	Side: 2 USB 3.0 (1 charging); 2 Thunderbolt™ 3/USB 3.1 (USB Type-C™ connectors); 1 SD 4.0 media card reader; 1 headphone/microphone combo Back: 1 DisplayPort 1.2; 4 USB 3.0; 1 RJ-45; 1 audio (retaskable to line-in, line-out, microphone) Internal: 1 USB 2.0 Type A, 2 internal on 9-pin header (not available on touch-capable option)

Drive Bays (Internal)	Two 2.5"
Input Device	HP USB Business Slim Keyboard; HP Wireless Business Slim Keyboard and Mouse; HP USB Hardened Mouse[7] HP USB Laser Scroll Mouse[7]
Camera	HP 2 MP HD 1080p Webcam and Digital Microphone Array
Software	HP Performance Advisor; Foxit PDF Solution; Buy Office; HP Remote Graphics Software (RGS) [9]
Security	HP Chassis Intrusion Sensor (optional) [12]
Power	330 W 90% efficient, wide-ranging, active power factor correction
Dimensions (W x D x H)	23.5 x 8.3 x 21.5 in 59.69 x 21.08 x 54.61 cm (With stand)
Weight	23.2 lb 10.51 kg (Exact weight depends on configuration)
Energy Efficiency Compliance	ENERGY STAR® certified configurations available
Environmental Certification	Low halogen[8]
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 limited 3 years parts, 3 years labor, and 3 years onsite service (3/3/3) standard warranty. Certain restrictions and exclusions apply.

HP Z1 G3 Workstation

Recommended accessories and services (not included)

NVIDIA Quadro M1000M 2GB Graphics Card

Efficiently create large, complex 3D models in your product development and media creation environments with the NVIDIA® Quadro® M1000M graphics card.
Product number: T8W13AA

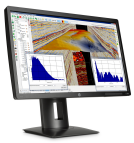
HP Z TurboDrive G2 512GB PCIe SSD

Super charge your productivity and creativity and deliver optimized HP Workstation workflows with the HP Z Turbo Drive G2 PCIe SSD, which delivers four times the read performance of traditional SSDs at a cost that's remarkably similar.
Product number: W5A07AA

HP External USB DVDRW Drive

Connect the HP External USB DVD/RW to any available USB port on your PC to get immediate read/write access to your optical media.
Product number: F2B56AA

HP Z24s 23.8-inch IPS UHD Display



Experience ultra high-definition /4K image presentation and factory-calibrated color accuracy out of the box with the HP Z24s 23.8-inch IPS UHD Display, which also delivers flexible connectivity and comfort features—all at HP's most affordable HP Z Display price point.
Product number: J2W50A8

HP Z27s 27-inch IPS UHD Display

Join the Ultra High Definition movement and expand your visual workspace with the HP Z27s 27-inch IPS UHD Display, which delivers an extra-large screen with UHD/4K presentation and flexible connectivity and comfort features.
Product number: J3G07A8

4Y Next Business Day Onsite with Defective Media Retention

Defective Media Retention (DMR) allows you to keep your hard drive if it is defective and requires replacement while under warranty. You maintain control of your sensitive data, and dispose of the defective media in a way that meets your security standards
Product number: U1G56E

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. 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.
[3] Intel® Xeon® E3 and Intel® Core™ i3 processors can support either ECC or non-ECC memory. Intel® Core™ i5/i7 processors only support non-ECC memory.
[4] Sold separately or as an optional feature.
[5] Compared to a similarly configured HP Z240 SFF with Z24s display.
[6] For hard drives, 1 GB = 1 billion bytes. 1 TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10) of disk space is reserved for the system recovery software.

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] 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.
[3] 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.
[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] Actual speeds may vary. Does not permit copying of commercially available DVD movies or other copyright protected materials. Intended for creation and storage of your original material and other lawful uses. Note that DVD-RAM cannot read or write to 2.6 GB Single Sided/5.2 GB Double Sided – Version 1.0 media.
[6] HD content required to view HD images.
[7] Sold separately or as an optional feature.
[8] Power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.
[9] HP Performance Advisor and HP Remote Graphics Software requires internet access.
[10] 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.
[11] The following applies to HP systems with Intel Skylake or next-generation silicon chip-based system shipping with Windows 7, Windows 8, Windows 8.1 or Windows 10 Pro systems downgraded to Windows 7 Professional, Windows 8 Pro, or Windows 8.1: This version of Windows running with the processor or chipsets used in this system has limited support from Microsoft. For more information about Microsoft's support, please see Microsoft's Support Lifecycle FAQ at https://support.microsoft.com/lifecycle
[12] Optional, factory configuration required.

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4AA6-4584ENUC, June 2016