HP Z2 Small Form Factor G8 Workstation



Small size. Endless options.

Get high-end performance in a compact device. Designed to pack more graphics and processing power into less space, you can easily take on 2D and 3D CAD projects. And with near endless configuration options, it's the ideal hardware option for custom solutions.¹



*Product image may differ from actual product

HP recommends Windows 10 Pro for business

Performance that defies space constraints.

Seamlessly render, design and run multiple apps with professional graphics and an Intel[®] Xeon[®] or Core[™] vPro^{®2} processor. With support for PCIe Gen 4 and designed for unthrottled performance, you can render in real-time and visualize projects faster.¹

Highly customizable to fit your needs.

 Build a system matched exactly to your needs with over a million possible configurations. And with customizable I/O ports, you can support new and legacy technologies, dynamic displays and even a second LAN—without messy dongles or adapters.

$\label{lem:leading} \mbox{Industry-leading security. Durability you can trust.}$

Backed by 360K hours of rigorous testing, military-standard testing,³ and software certifications, every
component is put to the test. And with hardened security features, your Z2 SFF is protected from the BIOS to the
browser, above and below the OS.

Access your Z2 SFF from anywhere.

- Tap into the power of your Z2 SFF from anywhere and on almost any device with HP ZCentral Remote Boost.⁴
 Get fast responsiveness and exceptional image quality on demanding projects. Seamlessly collaborate with
 dispersed teams, even on 3D models.
- Support your unique user needs with a choice of Windows 10 Pro 64⁵ or Linux® operating systems.
- Bring your ideas to life quickly and run multiple apps simultaneously with the latest Intel® Core™ vPro®² processors. For ultimate performance, choose the unlocked K-Series which allows for overclocking.⁶
- Run demanding professional apps with the latest Intel® Xeon® vPro® processors for powerful performance and
 productivity. And, avoid system crashes in the middle of your workflow with Error Correction Code memory.⁷
- Seamlessly render, design, and multitask on your biggest projects with a choice of up to NVIDIA® Quadro RTX™
 3000 or AMD Radeon™ Pro WX3200 graphics.
- Built with the environment in mind, this product contains recycled plastics, sustainably sourced packaging,⁸ ultra-efficient power consumption, and uses materials that meet GreenScreen® for Safer Chemicals' methodology standards.⁹
- Experience fast performance when working on complex design tasks with up to 128 GB DDR4 memory at an increased memory speed of up to 3200 MHz. 10
- Store massive amounts of data with up to 20TB¹¹ of storage, 3 hard drive bays and 2 M.2 SSD slots. With
 increased storage bandwidth enabled by PCle Gen 4 and double the external storage speed, you can download
 and access large files quickly.
- Configure to the needs today and adapt to the future. Options include DP 1.4, VGA, HDMI, Dual USB Type-A, USB Type-C® with Alt-DP or 2nd Serial and more.¹²
- Help keep your system clean while sitting on the factory floor or machining environment with the front-access dust filter.¹³
- Evolve your work. Evolve your rig. With tool-less access to the interior, you can customize your Z to fit your needs.
 Multiple PSII options, including the 450W PSII enable increasing need for GPII, even with the highest power.
- Multiple PSU options, including the 450W PSU, enable increasing need for GPU, even with the highest power CPUs and rich configurations.¹⁴
- Our engineers have custom tuned your PC to ensure peak performance for your heaviest workloads. Now you're ready to take on any task.¹⁵

HP Z2 Small Form Factor G8 Workstation Specifications Table



Warranty





*Product image may differ from actual produc	t
Available Operating Systems	Windows 10 Pro 64 – HP recommends Windows 10 Pro for business ¹ Windows 10 Pro 64 High End ¹ Windows 10 Pro for Workstations ^{1,2} Windows 10 Home 64 Plus ¹ Windows 10 Home 64 Advanced ¹ Linux® Reado ³
Processor family ⁴	Ubuntu 20.04 LTS ²⁷ 11th Congression Intel® Covern II processory 11th Congression Intel® Covern II processory 11th Congression Intel® Covern II processory
Processor family.	11th Generation Intel® Core™ i5 processor; 11th Generation Intel® Core™ i7 processor; 11th Generation Intel® Core™ i9 processor
Available Processors ^{4,5,6}	Intel® Core™ 19-11900K with Intel® UHD Graphics 750 (3.5 GHz base frequency, up to 5.3 GHz with Intel® Turbo Boost Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology, Intel® Core™ 19-11900F (2.5 GHz base frequency, up to 5.2 GHz with Intel® Turbo Boost Technology, 16 MB L3 cache, 8 cores), telte® vPro® Technology, intel® Core™ 19-11900 with Intel® UHD Graphics 750 (2.6 GHz base frequency, up to 5.0 GHz with Intel® Turbo Boost Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology, intel® (vPro® Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology, intel® (vPro® Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 8 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 16 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 17 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 17 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 17 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 17 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 17 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 17 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 17 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 17 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 18 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 18 MB L3 cache, 6 cores), supports Intel® vPro® Technology, 18 MB L3 cache, 8 cores), supports Intel® vPro® Technology, 18 MB L3 cache, 8 cores), supports Intel® vPro® Technology, 18 MB L3 cache, 8 cores), supports Intel® vPro® Technology, 18 MB L3 cache, 8 cores), suppo
Chipset	Intel® W580
Form factor	Small form factor
Maximum memory	128 GB DDR4-3200 ECC SDRAM; 128 GB DDR4-3200 non-ECC SDRAM Transfer rates up to 3200 MT/s.
Memory slots	4 DIMM
Internal storage	500 GB up to 2 TB 7200 rpm SATA HDD ⁷ 1 TB up to 8 TB 7200 rpm Enterprise SATA HDD ⁷ up to 500 GB 7200 rpm SED HDD ⁷ 256 GB up to 2 TB PCLe® NVMe™ TLC M.2 SSD ⁷ 256 GB up to 2 TB HP Z Turbo Drive PCLe® NVMe™ TLC M.2 SSD ⁷ 256 GB up to 2 TB HP Z Turbo Drive PCLe® NVMe™ SED Opal 2 TLC M.2 SSD ⁷
Optical drive	HP Slim DVD-ROM; HP Slim DVD-Writer 11.12
Available Graphics	Integrated: Intel® UHD Graphics 730; Intel® UHD Graphics 750; Intel® UHD Graphics P750 Discrete: AMD Radeon™ Pro WX 3200 (4 GB GDDR5 dedicated); NVIDIA® Quadro® P400 (2 GB GDDR5 dedicated); NVIDIA® Quadro RTX™ 3000 (6 GB GDDR6 dedicated); NVIDIA® T1000 (4 GB GDDR6 dedicated)3
Audio	Realtek ALC3205-VA2-CG, 2.0W internal mono speaker
Expansion slots	1 PCle 3 x4 (x16 connector); 1 PCle 3 x4 (x4 connector); 1 M.2 2230 PCle 3 x1; 1 PCle 4 x16; 1 M.2 2280 PCle 4 x4; 1 M.2 2280 PCle 3 x4; 1 PCle 3 x1 (x1 connector) (1 M.2 2230 slot for WLAN and 2 M.2 2280 slots for storage)
Ports and Connectors	Front: 2 SuperSpeed USB Type-A 10Gbps signaling rate; 1 universal audio jack; 2 SuperSpeed Type-A USB 5Gbps signaling rate (1 charging); 1 Type-C SuperSpeed® USB 20Gbps signaling rate (1 charging) Rear: 1 audio-out; 1 RJ-45; 2 DisplayPort™ 1.4; 2 SuperSpeed USB Type-A 10Gbps signaling rate; 1 SuperSpeed USB Type-A 5Gbps signaling rate; 3 USB Type-A 480Mbps signaling rate Optional Ports: Flex 10 — choose one of the following options: 1 DisplayPort™ 1.4, 1 HDMI 2.0b, 1 VGA,1 2nd 1GbE LAN, 1 Dual SuperSpeed USB Type-A 5Gbps signaling rate, 1 SuperSpeed USB Type-C® 10Gbps signaling rate (15W USB Power Delivery, Alt Mode DisplayPort™) 1 Thunderbolt™ 3 with SuperSpeed USB4 Type-C® 40Gbps signaling rate (cabled to PCIc® AIC); Front - 1 SD card reader; Rear - 1 Serial®
Input devices	HP USB Premium keyboard; HP Premium Wireless keyboard; HP Wireless Business Slim Keyboard and mouse combo; HP USB Business Slim SmartCard CCID Keyboard; HP Wirel Desktop 320MK Mouse and Keyboard; HP Wirel Desktop 320MK Mouse; HP Wirel 320M Mouse ³ ; HP USB Premium Mouse; HP Wireless Premium Mouse; HP Wirel 320M Mouse ³ ;
Communications	LAN: Intel® I219-LM GDE; Intel® I350-T2 dual-port GDE NIC; HP 10 GDE SFP+ SR Transceiver; Intel® X710-DA2 dual-port 10GDE SFP+ NIC; Aquantia AQN-108 1-port 5GDE NIC; Intel® Ethernet Network Adapter I225-T1; Intel® X550-T2 dual-port 10GDE NIC; WLAN: Intel® Wi-Fi 6 AX201 (2x2) and Bluetooth® 5 combo 10.28,29,30;
Drive Bays	One 3.5" HDD; One slim ODD; Two M.2 NVME 2280 SSD; One 2.5" HDD; One 3.5" HDD
Software	HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Support Assistant; HP PC Hardware Diagnostics Windows; ZCentral Remote Boost; HP Desktop Support Utilities; HP Image Assistant; HP Notifications; My HP; HP QuickDrop ^{15,16,17}
Security management	HP Secure Erase; HP Power On Authentication; HP Sure Click; Windows Defender; HP Sure Sense; HP BIOSphere Gen6; HP Client Security Manager Gen7; HP Sure Start Gen7; HP Sure Run Gen4; HP Sure Recover Gen4 ^{19,20,21,22,23,24,25,26}
Security Software Licenses	HP Pro Security Edition (select models) ⁵⁶
Management features	HP Driver Packs; HP Management Integration Kit for Microsoft System Center Configuration Management Gen4; HP System Software Manager (download); HP BIOS Configuration Utility (download) ¹⁸
Power	260 W 92% efficient, wide-ranging, active PFC; 450 W 90% efficient, wide-ranging, active PFC
Dimensions	33.8 x 30.8 x 10 cm (Standard desktop orientation.)
Weight	Starting at 5.4 kg (Exact weight depends on configuration.)
Energy efficiency compliance	ENERGY STAR® certified; EPEAT® Gold registered in US ¹³
Sustainable impact specifications	Ocean-bound plastic in speaker enclosure; 45% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; 80 Plus® Gold power supplies available; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable 14
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported. For more information see www.hp.com/go/zdisplays

3 year (3/3/3) limited warranty 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)

HP DisplayPort to HDMI True 4K Adapter



Make the most of the available ports on your HP Business Desktop or HP Workstation with the HP DisplayPort to HDMI True 4K Adapter, which converts your DisplayPort™ output to HDMI for quick and easy connection to a range of multimedia devices that can support 4K resolution and 60hz refresh.

Product number: 2JA63AA

HP USB-C to DP Adapter



Put your notebook or tablet's high-definition video content up on the big screen with the HP USB-C[™] to DP Adapter, which enables connection to an external display, TV or projector Product number: 4SH08AA

HP Wired Desktop 320MK Mouse and Keyboard



Work efficiently and enhance your everyday productivity with the reliable HP Wired Desktop 320MK Mouse and Keyboard. Product number: 9SR36AA

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: U1G39E**

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Messaging Footnotes

- 1 Based on HP's internal analysis of non-gaming small form factor desktop workstations with a minimum 3 ISV certs, configurable professional graphics, and a dedicated workstation brand as of April 2021. Power based on processor, graphics, memory, and powe

- 1 Based on HPs internal analysis of non-gaming small to the reaction washing strong the transfer of the processors. Profe is available on lall intel[®] Xeon® processors.

 2 who is available on Intel[®] Core[™] i5-11500 and above processors. who is available on all intel[®] Xeon® processors.

 3 Undergoes MiL-STD testing; MiL-STD testing is not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Accidental damage requires any opinional HP Accidental Damage Protection Care Service.

 4 HP Zentral Remote Boost does not come preinstalled on Z Workstations but can be downloaded and run on all Z desktop and laptops without an additional license purchase. When you purchase a Z device, you get an embedded license. With non-Z sender devices, it is a perpetual or floating license. ZCentral Remote Boost requires a Windows (10 or 7 S-P2), RHEL (6, 7 or 8), UBUNTU 18.04 LTS, or HP ThinPro operating system. MacOS (10.13 or newer) operating system is only supported on the receiver side. Requires network access. The software is available for download at hp.com/ZCentralRemoteBoost.

 5 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.

 5 Altering clock frequency or voltage may damage or reduce the useful life of the processors and other system components, and may reduce system stability and performance. HP does not warrant the product for over-clocked use.

 7 Error Correction Code (ECC) memory requires Intel[®] Xeon[®] processors.

 8 100% outer box packaging made from sustainably sourced certified and recycled fibers. Fiber cushions made from 100% recycled wood

- **Based on IEEE : 1000.1-2018 standards.

 10 Memory speed increase is compared gen/gen.

 11 For storage drives, 6B = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB is reserved for system recovery software.

 12 Flexible I/O needs to be configured at time of purchase.

 13 Sold separately or as an optional feature.

- ¹⁴ Optional feature that must be configured at purchase.
 ¹⁵ Intel DTT only enabled on Intel® Xeon® 8-core 80W and Intel® Core™ 8-core 65W processors.

Technical Specifications Footnotes

- 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 Some devices for academic use will automatically be updated to Windows 10 Pro Education with the Windows 10 Annows 10 Pro Education for Windows 10 Pro Education for Unix, see:

 3 For detailed OS/hardware support information for Linux, see: http://www.hp.com/support/linux_hardware_matrix

 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 For full Intel'y Prover* functionality, Windows 10 Pro 64 bit, a PPro supported processor, VPro enabled chipset, VPro enabled wired LAN and/or WLAN card and TPM 2.0 are required. Some functionality requires additional 3rd party software in order to run. See http://lintel.com/vpro
- Intel Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost for more information.

- Intel Lurbo Boost performance varies depending on hardware, software and overall system configuration. Seen this Journal, research professors per formance varies depending on hardware, software and overall system configuration. Seen this Journal, research professors are supported by the professor of the profess

- ** with Blu-Hay, Certain lost, digital critical to chieful to combined in the product. Flawless playback on an systems is not guaranteed, in order or some sur-lay titles to play, they may require HDCP support. HD-DVD movies cannot be played on this Desktop PC.

 13 Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit www.epeat.net for more information.

 14 External power cords, calbe and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

 15 HP ZCentral Remote Boost does not come preinstalled on Z Workstations but can be downloaded and run on all Z desktop and laptops without license purchase. With non-Z sender devices, purchase of perpetual individual license or perpetual floating license per simultaneously executing versions and purchase of ZCentral Remote Boost Software Support is required. RGS requires Windows, RHEL (7 or 8), UBUNTU 18.04 LTS, or HP ThinPro 7 operating systems. MacOS (10.13 or newer) operating system is only supported on the receiver side. Requires network access. The software is available for download at hpt.com/CentralRemoteBoost.

 16 HP Performance Advisor Software HP Performance Advisor is ready and waiting to help you get the most out of your HP Workstation from day one—and every day after. Learn more or download at: https://www8.hp.com/us/en/workstations/performance-advisor hrm.
- advisor.html
- 17 HP Support Assistant requires Windows and Internet access

- 1 H Support Assistant requires Windows and Internet access.
 18 H PM Anageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html
 19 H P Client Security Manager Gen7requires Windows and is available on the select H P PCs.
 20 H P BIOSphere Gen6 features may vary depending on the platform and configurations.
 21 H P Sure Click requires Windows 10 Pro or Enterprise. See https://bit.ly/2PLT6A_SureClick for complete details.
 22 H P Sure Start Gen7 is available on select HP PCs and workstations. See product specifications for availability.
 23 H P Sure R In Gen4 is available on select HP PCs and workstations. See product specifications for availability.
 24 H P Sure Recover Gen4 is available on select HP PCs and requires an open network connection. You must back up impropriant files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.
 24 H P Sure Recover Gen4 is available on the National locativity and Stardards and Tochonomy. Special Dublication 900.48 "Clara"s availation method HP Server Erace does not support platforms with blotal®.
- 25 Secure Erase For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane.
 26 HP Sure Sense requires Windows 10 Pro or Enterprise and supports Microsoft Internet Explorer, Google Chrome™, and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode, when Microsoft Office

- ²⁶ HP Sure Sense requires Windows 10 Pro or Enterprise and supports Microsoft Internet Explorer, Google Chrome™, and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode, when Microsoft Office of Adobe Acrobat are installed.

 ²⁷ A certified preloaded version of Ubuntu® 20.04 LTS is available from HP for this platform.

 ²⁸ Wireless access point and internet service required and sold separately. Availability of public wireless access points limited.

 ²⁹ Wirel 6 is backwards compatible with prior 80.21 1 specs. The Specifications for the 802.11 ax WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the PC to communicate with 802.11 ax WLAN devices. Wirel 6 requires a wireless router, sold separately, that supports 802.11 ax (Wi-Fi 6). Only available in countries where 802.11 ax is supported. 30 Intel® 1225 and Intel® X710 will be available in Q3, 2021
- 56 HD Pro Security Edition is available preloaded on select HP PCs and includes HP Sure Click Pro and HP Sure Sense Pro. 3-year license required. The HP Pro Security Edition software is licensed under the license terms of the HP End User License Agreement (EULA) that can be found at: https://h30670.www3.hp.com/ecommerce/common/disclaimer.dolf8h.U.S as modified by the following: 7. Term. Unless otherwise terminated earlier pursuant to the terms contained in this EULA, the license for the HP Pro Security Edition (HP Sure Sense Pro and HP Sure Click Pro) is effective upon activation and will continue for thirty-six (36) months thereafter ("Initial Term"). At the end of the Initial Term you may either (a) purchase a renewal license for the HP Pro Security Edition from HP.com, HP Sales or an HP Channel Partner, or (b) continue using the standard versions of HP Sure Sense a thirt hor futures offware updates or HP Pro Security Edition is optimized for the SMB environment and ships pre-configured manageability is optional. The HP Pro Security Edition supports a limited tool set that can be used by the HP Manageability Integration Kit which can be downloaded from http://www.hp.com/go/clientmanagement .

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