HP Z2 Tower G9 Workstation Desktop PC

Pro-power. Today and tomorrow.

Experience a whole new level of performance for your professional workflow. The Z2 Tower is engineered to seamlessly run multi-threaded apps for fast rendering, simulation, and now real-time ray tracing. And when your demands change, you have impressive expandability to upgrade.



*Product image may differ from actual product

HP recommends Windows 11 Pro for business

Your new benchmark for entry workstation power

Unleash the power of professional graphics and an Intel[®] Core[™] processor, including K-Series, on intensive multi-threaded apps. Designed for zero throttling so you can render, simulate, and even real-time ray trace without overheating or slow downs.

Built to expand. Power to grow

 Need to upgrade graphics? Increase memory or storage? Add specialized PCIe cards? Go for it. With room to expand and tool-less access, you can easily upgrade and add components as your needs evolve. This is an investment that will last for years.

Industry-leading security. Reliability you can trust

- Get peace of mind with a PC that's built to endure. The Z2 Tower undergoes 360K hours of rigorous testing, military-standard testing² and is certified for pro apps. And with HP Wolf Security for Business¹, it's protected below, in and above the OS.
- Support your unique user needs with a choice of Windows 11 Pro, WSL2 or Linux® operating systems.⁴
- Bring your ideas to life quickly and run multiple apps simultaneously with the latest Intel[®] Core™ vPro^{®6} processors. For added performance, choose the K-Series.
- Design, render, ray-trace and even work on large datasets seamlessly with up to NVIDIA RTX A5000 and AMD Radeon Pro X with PCIe G5 high speed bandwidth.⁷
- Experience fast performance when working on complex design tasks with 4 DIMMs for up to 128GB DDR5 memory at an increased memory speed of up to 4400MHz.⁸
- Storage fit for a pro. Get up to 48TB with 3x M.2 storage slots and RAID for added performance and reliability.⁹
- Configure to the needs today and adapt to the future with multiple flex I/O options. Choose from DP 1.4, VGA, HDMI, Dual USB Type-A, USB Type-C[®] with Alt-DP or 2nd Serial and more ¹⁰
- HP Wolf Security for Business creates a hardware-enforced, always-on, resilient defense.
 From the BIOS to the browser, above, in, and below the OS, these constantly evolving solutions help protect your PC from modern threats.¹
- Evolve your work. Evolve your rig. With tool-less access to the interior, you can customize your Z to fit your needs.
- Connect at a clip with fast network connectivity with 10Gb Ethernet interface.
- Work with confidence knowing your desktop is certified with leading software applications to ensure peak performance.³
- Innovatively designed to keep hardware components cool and quiet no matter how hard you push it. Have confidence to run your system at max load 24/7.
- Custom tune your PC to ensure peak performance with three different modes to takle any
 task

HP Z2 Tower G9 Workstation Desktop PC Specifications Table







*Product image may differ from actual product

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Available Operating Systems	Windows 11 Ptp ¹ Windows 11 Htmme + HP recommends Windows 11 Pto for Business ¹ Linus [®] Ready ³ Ubuntu 2:0.04 LTS ²⁷
Processor family ⁴	12th Generation Intel® Core™ 17 processor; 12th Generation Intel® Core™ 19 processor; 12th Generation Intel® Core™ 13 processor; 12th Generation Intel® Core™ 15 processor
Available Processors	Intel® Core™ IS-12400 with Intel® UHD Graphics (2.5 GHz P-core base frequency, up to 4.4 GHz P-core Max Turbo frequency, 18 MB L3 cache, 6 P-cores, 12 threads); Intel® Core™ IS-12300 with intel® UHD Graphics (3.5 GHz P-core base frequency, up to 4.3 GHz P-core Max Turbo frequency, 12 MB L3 cache, 4 P-cores, 8, threads), Intel® Core™ IS-12000 with Intel® UHD Graphics (3.5 GHz P-core base frequency, up to 4.3 GHz P-core base frequency, up to 4.3 GHz P-core base frequency, up to 4.3 GHz P-core base frequency, up to 4.5 GHz P-core base frequency, up to 5.0 GHz P-core base frequency, up to 4.6 GHz P-c
Maximum memory	128 GB DDR5-4400 non-EC SDRAM; 128 GB DDR5-4400 ECC SDRAM ²⁹ Transfer rates up 04 400 MT/S.
	Transfer rates up to 4400 MT/s.
Memory slots	4 DIMM
Internal storage	500 GB up to 2 TB 7200 rpm SATA HDD ⁷ 1 TB up to 17 B7 7200 rpm SATA HDD ⁷ up to 500 GB 7200 rpm SED HDD ⁷ 512 GB up to 4 TB H ² 2 Turbo Drive PCle [®] NVMe™ TLC M.2 SSD ⁷ 512 GB up to 4 TB H ² 2 Turbo Drive PCle [®] NVMe™ SED Opal 2 TLC M.2 SSD ⁷ 512 GB up to 4 TB H ² 2 Turbo Drive PCle [®] NVMe™ SED Opal 2 TLC M.2 SSD ⁷ 256 GB up to 1 TB PCle [®] NVMe™ Value M.2 SSD ⁷ 500 GB up to 2 TB RC MSH ² SET Oranovable NVMe™ Module ⁷
Optical drive	HP Slim DVD-ROM; HP Slim DVD-Writer 11,12 (##opticaldriveavailnote##)
Available Graphics	Integrated: Intel® UHD Graphics 770 Entry 3D: NVIDIA® 1400 4 GB; NVIDIA® 1400 2 GB; NVIDIA® 1500 4 GB ³² Mid-ranga 3D: AMD Radeon™ Pro W6500 (8GB GDDR6 dedicated); NVIDIA® 11000 8 GB; NVIDIA® 11X™ A2000 12GB; NVIDIA® 11000 4 GB High-end 3D: AMD Radeon™ Pro W6500 (32 GB GDDR6 dedicated); NVIDIA® RTX™ A5000 24 GB; NVIDIA® RTX™ A4000 16 GB; AMD Radeon™ RX 6700 XT (12 GB GDDR6 dedicated)
Audio	Realtek ALC3205-VA2-CG, 2.0W internal mono speaker
Expansion slots	1 PCIe 3 x4 (x16 connector); 1 PCIe 3 x4 (x4 connector); 1 PCIe 3 x1 (x4 connector); 1 PCIe 3 x1 (x4 connector); 1 PCIe 5 x16 (x16 connector); 1 M.2 2230 PCIe 3 X1 for WLAN (1 M.2 2230 slot for WLAN and 3 M.2 2280 slots for storage)
Ports and Connectors	Front: 4 SuperSpeed USB Type-A 10Cdps: signaling rate (1 therging): 1 universal audio jack: Rear: laudio-vin; 1 Lefs; 2 Display-Part** 14, 2 SuperSpeed USB Type-A 10Cdps: signaling rate; 1 SuperSpeed USB Type-A 5Cdps: signaling rate; 3 USB Type-A 400Mbps signaling rate; 0 Optional Ports: Rev. ID - choose one of the following options: 1 Display-Part** 1, 1 HDM 2 cbb. 1 VGA; 2 red 1 Cbb. LAN, 1 Dual SuperSpeed USB Type-A 5Cdps: signaling rate; 1 Charling rate (1 charging), 2 SuperSpeed USB Type-A 5Cdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 charging), 2 SuperSpeed USB Type-A 5Cdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Charging), 2 SuperSpeed USB Type-A 5Cdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Charging), 2 SuperSpeed USB Type-A 5Cdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-A 5Cdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-A 5Cdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-A 5Cdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Speed USB Type-C 2 OCdps: signaling rate; 1 Service Sp
Input devices	HP Wired Desktop 320K keyboard; HP Wired Desktop 320MK Mouse and Keyboard; HP 125 Wired Keyboard; HP 655 Wireless Keyboard and mouse combo; HP 975 Wireless Keyboard; HP 455 Programmable Wireless Keyboard?; HP Wired Desktop 320M mouse; HP wired desktop 128 laser mouse; HP 125 Wired Mouse; HP Creator 935 Black Wireless Mouse ⁸ .
Communications	LAN: Integrated Intel® 1219-LM GBE; Intel® 1225-LM 2.5 GbE LOM, non-vPro®; Intel® Ethernet Network Adapter 1225-T1; Intel® X550-T2 dual-port 10GbE NIC; Allied Telesis AT-2911T/2-901 dual-port 1GbE NIC 30; WLAN: Intel® Wi-Fi GE AX211 (2x2) and Bluetooth® 5.3 wireless card with external antenna 20;
Orive Bays	One slim ODD; One 5.25" ODD; One 2.5" HDD; Two 3.5" HDD; Three M.2 NVME 2280 SSD
Software	HP PC Hardware Diagnostics UEFI; HP Support Assistant; HP PC Hardware Diagnostics Windows; ZCentral Remote Boost; HP Image Assistant; HP Manageability Integration Kit; Performance Advisor 3.0; 15,16,17
Security management	HP Secure Erase; HP Sure Click; HP BIOSphere Gen6; HP Sure Admin; Hood Sensor Optional Kit; HP Client Security Manager Gen6; HP Sure Start Gen7; HP Sure Recover Gen4; HP Sure Sense Gen2; HP Sure Run Gen5; 1920;1222,242,243,243
Security Software Licenses	HP Wolf Pro Security Edition 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	350 W 92% efficient, wide-ranging, active PFC; 700 W 92% efficient, wide-ranging, active PFC; 500 W 90% efficient, wide-ranging, active PFC
Dimensions	35.6 x 16.9 x 38.5 cm; (Standard tower orientation.)
Veight	Starting at 7.2 kg; (Exact weight depends on configuration.)
Ecolabels	IT ECO Declaration; TCO Certified configurations available; EPEAT® Gold registered in the U.S.13.31
Energy star certified (series fixed)	ENERGY STAR® certified
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; Ocean-bound plastic in speaker enclosure and system fan; Contains recycled metal
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported. For more information see www.hp.com/go/zdisplays

HP Z2 Tower G9 Workstation Desktop PC

Accessories and services (not included)

NVIDIA RTX A4000 16 GB 4DP Graphics



Product number: 20X24AA

HP CRU QX328 5.25 in Front Removable Frame



Product number: 4N011AA

HP Business Slim Smartcard Keyboard



Boost your productivity, make a stylish IT choice, and get integrated security features with the HP USB Slim Smartcard Keyboard, which has a built-in smart card reader and is designed to complement the latest HP Business PCs.

Product number: Z9H48AA

¹ Refer to cleaning instructions in user guide.

HP 5-year Next Business Day Onsite



Receive 5 years of next business day onsite repair from an HP-qualified technician for your computing device, if the issue cannot be solved remotely. For more information on Care Pack services, please visit www.hp.com/go/cpc.

Product number: U7944E

Workstation Only Hardware Support



HP Care Pack

HP Z2 Tower G9 Workstation Desktop PC

Messaging Footnotes

- 1 HP Wolf Security for Business requires Windows 10 or higher, includes various HP security features and is available on HP Pro, Elite, RPOS and Workstation products. See product details for included security features and OS requirement.
 2 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 or damage under these test conditions requires an optional HP Accidental Damage Protection Care Pack.

Third party software sold separately.

- 4 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 11 Pro is automatically updated. *Not all teatures 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 11 Pro is automatically upda which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. Some functional strategies and additional requirements may apply over time for updates. Some functional strategies and software or 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.

 For full Intel' vProe functionality, Windows 10 Pro 64 bit, a vPro 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://intel.com/vpro

- Sold separately or as an optional feature.

Gen over aen.

For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36GB of system disk (for Windows 11) is reserved for system recovery software

Optional features that must be configured at purchase or are sold separately

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 is automatically updated and *Not at leatures are available in all eductors or vestions to windows, systems may explain early updated and enabled. High special internal and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.

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

Authorize 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.

For full Intel® vPro™ functionality, Windows 11 Pro 64 bit, a vPro 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

6 Intel Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost for more information

* First storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. TB = 1 trillion bytes. May are atto user-atted capacity is less. Up to 36GB of system disk (for Windows 11) is reserved for system recovery software.

**Flex IO port and one PCIe slot will be occupied when Thunderbolt is installed.

**Reyboard and Mouse are optional or add on features.

**O Specific chassis required for 550 W 92% efficient, wide-ranging, active PFC power supply.

**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.

**Like MB-LR-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 HOM drivids connection and your display may require HDCP support. HD-DVD movies cannot be played on this Desktop Drive.

** With Blu-Ray, Certain lost, cligifact misc, compaction of contributions, compaction of contributions and on the Constitution of the 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.

13 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. ZCentral Remote Boost software Support sequired is available for download at hp.com/ZCentralRemoteBoost.

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 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 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 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 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 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

- advisor.html

 17 HP Support Assistant requires Windows and Internet access.

- 1 HP Manageability Integration Nit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html
 1 HP Manageability Integration Nit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html
 1 HP Client Security Manager Gen7 requires Windows and is available on select HP PCs.
 2 HP BIOSphere Gen6 features may vary depending on the platform and configurations.
 2 HP Sure Click requires Windows 11 Pro or Enterprise. See https://bit.ly/2PrLT6A_SureClick for complete details.
 2 HP Sure Start Gen7 is available on select HP PCs and verdistations. See product specifications for availability.
 2 HP Sure Near Gen6 is available on select HP PCs and requires Windows 10 and higher.
 2 HP Sure Recover Gen4 is available on select HP PCs and requires an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.
 3 HP Secure Farse for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Farse does not support platforms with Intel® Optane™.
 3 HP Secure Farse for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Farse does not support platforms with Intel® Optane™.
 3 HP Secure Area is installed. Adobe Acrobat are installed

- Adobe Acrobat are installed.

 27 A certified peloaded 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. Wi-Fi 6 (802.11ax) is backwards compatible with prior 802.11 specs.

 29 Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed.

 30 Intel 1350-14 4-port GBe ING: san AMO only.

 31 TCO Certified configurations available when ENERGY STAR configurations are selected with a USB type C connector. ENERGY STAR available with a combination of high-performance CPUs, high-performance GPUs and select memory configurations.

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