ProductSheet
HP Z1 G9 Tower Desktop PC (5F0T8EA)

The most affordable pro-certified Z desktop

Pro-grade performance is now within reach with a desktop built for designing, editing and even gaming. From 2D and 3D CAD to entry VR content creation, gain speed and efficiency across your workflows. Go beyond a commercial PC with a desktop certified for select professional software applications.

HP recommends Windows 11 Pro for business

Upgrade your performance
Easily multitask with an Intel® Core™ processor paired with the ideal graphics for your work. Designing in CAD? Accelerate 3D workflows with professional GPUs.

Certified for your workflow
Work confidently knowing your desktop is tested and certified for select professional apps. We've worked closely with software providers on apps like AutoCAD®, SOLIDWORKS® and Revit® so you get seamless, reliable performance across your workflow.[3]

Industy leading security
HP Wolf for Business security[4] features come standard on every Z1 Tower, for an always-on, always-acting, resilient defense. From the BIOS to the browser, above and below the OS, these constantly evolving solutions help protect your PC from threats.

Featuring

Intel® Core™ i9 processor
Get high-end performance for intensive tasks like rendering and video editing with the Intel® Core™ i9 processor. [1]

NVIDIA® GeForce RTX™ 3070 graphic card
Creating in VR? Amp up your experience with NVIDIA® GeForce RTX™ 3070 graphics.

Specifications

Operating system	Windows 10 Pro (available through downgrade rights from Windows 11 Pro)[1,2]
Processor family	12th Generation Intel® Core™ i9 processor
Processor	Intel® Core™ i9-12900 (up to 5.1 GHz with Intel® Turbo Boost Technology, 30 MB L3 cache, 16 cores, 24 threads)[6,7]
Memory	32 GB DDR5-4800 MHz RAM (1 x 32 GB)
Memory Slots	4 DIMM
Internal Storage	1 TB PCIe® NVMe™ TLC SSD
Graphics	Discrete
Graphics (discrete)	NVIDIA® GeForce RTX™ 3070 (8 GB GDDR6 dedicated)
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics 730
Audio	Realtek ALC3205 codec, universal audio jack with CTIA and OMTP headset support
Minimum dimensions (W x D x H)	33.7 x 30.8 x 15.5 cm
Weight	5.7 kg *(Exact weight depends on configuration.)*
Keyboard	HP USB 320K Keyboard
Pointing device	HP Wired 320M Mouse
Ports	1 SuperSpeed USB Type-C® 20Gbps signaling rate (1 charging); 4 SuperSpeed USB Type-A 10Gbps signaling rate (1 charging); 1 universal audio jack
Expansion slots	1 M.2 2230; 2 PCIe 3 x1; 1 PCIe 3 x16 (wired as x4); 2 M.2 2280; 1 PCIe 4 x16 *(1 M.2 2230 slot for WLAN and 2 M.2 2280 slots for storage)*
Ports	1 audio-out; 1 power connector; 1 RJ-45; 2 DisplayPort™ 1.4; 3 USB Type-A 480Mbps signaling rate; 3 SuperSpeed USB Type-A 10Gbps signaling rate
Ports	1 USB 3.1 Type-C™ (charging)
Package dimensions (W x D x H)	28.7 x 40 x 49.9 cm
Package weight	9.24 kg
Ecolabels	EPEAT® registered
Energy star certified	ENERGY STAR® certified
Management features	HP Client Catalog (download); HP Cloud Recovery; HP Driver Packs; HP Management Integration Kit for Microsoft System Center Configuration Management Gen4; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Image Assistant (download); Ivanti Management Suite (download); HP Client Management Script Library (download)[18,22,23,24]
Sustainable impact specifications	45% post-consumer recycled plastic; 5% ITE-derived closed loop plastic; Bulk packaging available; 80 Plus® Platinum 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
Security management	HP Power On Authentication; Power-on password (via BIOS); SATA port disablement (via BIOS); Setup password (via BIOS); Support for chassis padlocks and cable lock devices; USB enable/disable (via BIOS); Serial enable/disable (via BIOS); HP Sure Click; Windows Defender; HP Sure Sense; HP Client Security Manager Gen7; HP Sure Start Gen7; HP Sure Run Gen4; HP Sure Recover Gen4; HP Tamper Lock; TPM 2.0 Embedded Security Chip (Common Criteria EAL4+ Certified) (FIPS 140-2 Level 2 Certified) [25,26,27,28,29,30,31]
Software included	HP Jumpstart; HP Noise Cancellation Software; HP Support Assistant; Buy Office (sold separately); HP Privacy Settings; HP Desktop Support Utilities; HP Setup Integrated OOBE[21]
UPC number	(ABT) 197029505866; (UUZ) 197029139320

Top Recommended Displays, Accessories and Services

No Top Recommended Displays, Accessories and Services

Messaging Footnotes

[1] 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.

[3] Third party software sold separately.

[4] 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.

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 enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.

[2] This system is preinstalled with Windows 10 Pro software and also comes with a license for Windows 11 Pro software and provision for recovery 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.

[6] 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, branding and/or naming is not a measurement of higher performance.

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

[18] HP Cloud Recovery is available for HP Elite and Pro desktops and laptops PCs with Intel® or AMD processors and requires an open, wired network connection. Note: You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Detail please refer to: https://support.hp.com/us-en/document/c05115630 .

[21] HP Support Assistant, requires Windows and Internet access.

[22] HP Driver Packs: Not preinstalled, however available for download at http://www.hp.com/go/clientmanagement .

[23] HP Manageability Integration Kit can be downloaded from http://www.hp.com/go/clientmanagement .

[24] Ivanti Management Suite subscription required.

[25] HP Client Security Manager Gen6 requires Windows and is available on select HP Pro and Elite PCs.

[26] Windows Defender Opt in Windows 11 and internet connection required for updates.

[27] HP Sure Start Gen7 is available on select HP PCs and workstations. See product specifications for availability.

[28] HP Sure Sense requires Windows 11 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 or Adobe Acrobat are installed.

[29] HP Sure Run Gen4 is available on select HP PCs and requires Windows 10 and higher.

[30] HP Sure Recover Gen4 is available on select HP PCs and requires an open network connection. Not available on platforms with multiple internal storage drives. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.

[31] HP Sure Click requires Windows 10 Pro or higher or Enterprise. See https://bit.ly/2PrLT6A_SureClick for complete details.