



HP Z1 G9 Tower Desktop PC (5F0E8EA)



Overview

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.

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.

Industry 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.

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]

Features

Intel® Core™ i7 processor

Run several CPU-heavy programs simultaneously without sacrificing performance with an Intel® Core™ i7 processor.^[1]

[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.

[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.

Specifications

Operating system	Windows 10 Pro (available through downgrade rights from Windows 11 Pro) ^[1,2]
Processor family	12th Generation Intel® Core™ i7 processor
Processor	Intel® Core™ i7-12700 (up to 4.9 GHz with Intel® Turbo Boost Technology, 25 MB L3 cache, 12 cores, 20 threads) ^[6,7]
Number of processors	1
Memory	16 GB DDR5-4800 MHz RAM (1 x 16 GB)
Memory Slots	4 DIMM
Internal Storage	512 GB PCIe® NVMe™ M.2 SSD
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics
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 <i>(Exact weight depends on configuration.)</i>
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 <i>(1 M.2 2230 slot for WLAN and 2 M.2 2280 slots for storage)</i>
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
Package dimensions (W x D x H)	28.7 x 40 x 49.9 cm
Package weight	9.24 kg
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

(ABB) 196786206849; (ABE) 196548722907; (ABH) 196786206856; (ABT) 197029505842

Manufacturer Warranty

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.

Additional specifications

Additional information on the product category	For the latest information, please visit our Web site at http://www.hp.com/workstations
Datasheet photo 1	AHID/edaf6f0c8042b74b55eb7ef2498e28b199818130
Datasheet photo 3	AHID/1f71a6d20997d6d605650052357f0589990c0d6a
Datasheet photo 4	AHID/fae08dc0015f78ca545311514fef5fd908d65800
Datasheet photo 5	AHID/274b548c57bd21b9b66f0166924110f36ad2fbdc
Graphic card footnote number	[16,17,39,40]
Graphics	Discrete
Graphics (discrete)	NVIDIA® GeForce RTX™ 3060 (12 GB GDDR6 dedicated)
Graphics card brand	NVIDIA®
Graphics card family	GeForce
Graphics card form factor	PCIe x16
Graphics card memory size	12
Graphics card memory size uom	GB
Graphics card memory type	GDDR6
I/O Port location	Rear
I/O Port location	Front
Keyboard interface	USB
Legal tagline	HP recommends Windows 11 Pro for business
Memory and storage	16 GB memory; 512 GB SSD storage
Memory layout (slots & size)	1 x 16 GB
Memory module type	DIMM
Memory size	16
Memory size uom	GB
Memory speed	4800
Memory speed uom	MHz
Memory type	DDR5
Model Number	RTX™ 3060
Number of memory slots	1
Playbook TS icon OS	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905482.png
Playbook TS icon battery life	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905264.png
Playbook TS icon connectivity	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201987.png

Playbook TS icon dimensions tower	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201997.png
Playbook TS icon graphics	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08169202.png
Playbook TS icon memory	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08267700.png
Playbook TS icon processor	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201972.png
Playbook TS icon storage	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08192819.png
Playbook TS icon weight imperial	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c05790117.png
Playbook TS icon weight metric	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08267650.png
Processor Brand	Intel®
Processor base frequency	2.1
Processor cache	25 MB L3
Processor core	12
Processor family	Core™ i7
Processor frequency UOM	GHz
Processor frequency technology	Intel® Turbo Boost Technology
Processor generation	12th Generation
Processor maximum frequency	4.9
Processor maximum frequency uom	GHz
Processor model	12700
Processor threads	20
Product long name specifications	HP Z1 G9 Tower Desktop PC, Windows 10 Pro (available through downgrade rights from Windows 11 Pro), Intel® Core™ i7, 16GB RAM, 512GB SSD, NVIDIA® GeForce RTX™ 3060
Product short name specifications	HP Z1 G9 Tower Desktop PC, Intel® Core™ i7, 16GB RAM, 512GB SSD

Sales office and telephone number

Albania: +49 89 9396 1803; Algeria: +213 (0) 61 68 23 00; Austria: +43 (0) 810 00 60 80; Bahrain: 800 171; Belgium: +32 (02) 729 71 11; Bulgaria: +359 2 969 87; Bosnia-Herzegovina: +49 89 9396 1803; Commonwealth of Independent States (CIS): +(095) 923 50 01; Croatia: +385 1 606 02 00; Czech Republic: +420 261 108 108; Denmark: +45 48 12 10 00; HP East Africa, Authorized Consultant: +254 20 27 16 111 ; Egypt: HP +202 792 5070 ; Estonia: +372 6 813 820; Finland: HP Myyntipalvelu 010 217 2700; France: +33 (0) 826 800 400; Germany: +49 (0) 180 532 62 22; Greece: +30 801 11 22 55 47; Hungary: +36 (1) 382 11 11; Iceland: +354 (1) 67 10 00; Ireland: +353 1 615 82 00; Israel: +972 9 830 48 48; Italy: Prodotti +39 02 92607 330, Servizio HP Care Pack: +39 02 9212 2040; Kazakhstan & Kyrgyzstan: +7 327 2 58 43 43; Latvia: +371 703 07 00; Lithuania: +370 5 2103 300; Luxembourg : (+352) 263 160 34 Macedonia: +49 89 9396 1803; Malta: +49 89 9396 1803; Middle East (Within UAE Toll Free): 800 45 20; Moldova: +49 89 9396 1803; Morocco (African Region): Call Centre +212 22 40 47 47, HP Sale Office +212 22 97 37 37/+212 22 43 64 00; Netherlands: 0800 266 7272; Nigeria: + 234 13 205 241/3; Norway: +47 24 09 70 00; Poland: 0 801 522 622 and/or 00 48 22 565 77 00 (calls are charged at national rates); Portugal: +351 808 200 808 (end user welcome desk for commercial products) ; Romania: +40 (21) 303 83 00; Saudi Arabia: (Toll free) 800 897 14 33, Office Number: +96612731200; Serbia and Montenegro: +381 11 201 99 00; Slovakia: 0800 147 147; Slovenia: +386 1 230 74 20; Spain: +34 (91) 631 16 00; Sweden: +46 200 27 00 00; Switzerland: Pre-sales/product information +41 (0) 848 88 44 66, Spare parts, manuals +41 (0) 848 84 74 64; Tunisia: +216 1 89 12 22; Turkey: +90 (212) 444 79 79; UAE (Toll Free): 800 45 20; UAE (Toll Free): 800 45 20 or 800 49 10; Ukraine: +380 44 490 61 20 ; United Kingdom: HP Teleweb Glasgow +44 (0) 845 270 40 00

Standard memory note Transfer rates up to 4800 MT/s.

Storage capacity 512

Storage capacity uom 01 GB

Storage form factor 01 M.2

Storage interface 01 PCIe®

Storage interface protocol 01 NVMe™

Storage type SSD

Storage type 01 SSD

UNSPSC code 43211515

[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.

Accessories

Memory

★ : Recommended

DDR4 Memory

16GB DDR5 (1x16GB) 4800 UDIMM NECC Memory	4M9Y0AA
16GB DDR5 (1x16GB) 4800 UDIMM NECC Memory	4M9Y0AT
32GB DDR5 (1x32GB) 4800 UDIMM NECC Memory	4M9Y2AA
32GB DDR5 (1x32GB) 4800 UDIMM NECC Memory	4M9Y2AT
8GB DDR5 (1x8GB) 4800 UDIMM NECC Memory	4M9X9AA
8GB DDR5 (1x8GB) 4800 UDIMM NECC Memory	4M9X9AT

PC Drives and Storage

PC Solid State Drives

1TB PCIe 4x4 NVMe TLC SSD	406L7AA
512GB PCIe 4x4 NVMe TLC SSD	406L8AA
HP PCIe NVME TLC 256GB SSD M.2 Drive	1CA51AA
HP PCIe NVME TLC 512GB SSD M.2 Drive	X8U75AA

PC SATA Hard Drives

HP 1TB 7200rpm SATA (NCQ/Smart IV) 6Gbp/s Hard Drive	QK555AA
HP 1TB 7200rpm SATA (NCQ/Smart IV) 6Gbp/s Hard Drive	QK555AT
HP 500GB 7200rpm SATA (NCQ/Smart IV) 6.0 Gbp/s Hard Drive	QK554AA

Keyboards/Mice and Input Devices

Keyboards

HP 125 USB WD KBD (Bulk 12)	266C9A6
HP 125 Wired Keyboard	266C9AA
HP 125 Wired Keyboard	266C9ET
HP 455 Programmable Wireless Keyboard	4R177A6
HP 455 Programmable Wireless Keyboard	4R177AA
HP 455 Programmable Wireless Keyboard	4R177ET
HP Business Slim Smartcard Keyboard	Z9H48AA
HP Wired Desktop 320K Keyboard	9SR37AA
HP Wired Desktop 320K Keyboard	9SR37ET
HP Wired Desktop 320K Keyboard (Bulk12)	9SR37A6

Mice

HP 125 Wired Mouse	265A9AA
HP 125 Wired Mouse	265A9ET
HP 125 Wired Mouse (Bulk120)	265A9A6
HP 128 LSR WRD Mouse (Bulk120)	265D9A6
HP 128 Laser Wired Mouse	265D9AA
HP 128 Laser Wired Mouse	265D9ET
HP USB Fingerprint Mouse	4TS44AA
HP USB Fingerprint Mouse	4TS44ET
HP Wired Desktop 320M Mouse	9VA80AA
HP Wired Desktop 320M Mouse	9VA80ET

Keyboard and Mouse Kits

HP 225 Wired Mouse and Keyboard Combo	286J4AA
HP 225 Wired Mouse and Keyboard Combo	286J4ET
HP 655 Wireless Keyboard and Mouse Combo	4R009AA
HP 655 Wireless Keyboard and Mouse Combo (Black 10)	4R009A6
HP 655 Wireless Keyboard and Mouse Combo (Black 10)	4R009ET
HP Wired Desktop 320MK Mouse and Keyboard	9SR36AA
HP Wired Desktop 320MK Mouse and Keyboard	9SR36ET

Security and Protection

PC Locks

HP Business PC Security Lock v3 Kit	3XJ17AA
HP Keyed Cable Lock 10 mm	T1A62AA

Cables/Cable Kits/Cable Adapters

Audio and Video Cables

HP DisplayPort Cable Kit	VN567AA
HP DisplayPort To VGA Adapter	AS615AA
HP DisplayPort To VGA Adapter	AS615AT
HP DisplayPort To VGA Adapter	F7W97AA
HP DisplayPort to HDMI True 4K Adapter	2JA63AA

PC Cable Options

HP HDMI Standard Cable	T6F94AA
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Expansion Solution and Controller Cards

Port Adapters

HP DisplayPort Port Flex IO v2	13L54AA
HP HDMI Port Flex IO v2	13L55AA
HP Internal Serial Port (600/705/800)	3TK82AA
HP PCIe x1 Parallel Port Card	N1M40AA
HP Serial Port Flex IO v3	5B895AA
HP Type-C USB 3.1 Gen2 Port Flex IO v2	13L59AA
HP USB to Serial Port Adapter	J7B60AA
HP VGA Port Flex IO v2	13L53AA

Graphics Cards

Graphics Connectors/Adapters

HP HDMI to VGA Adapter	H4F02AA
HP HDMI to VGA Adapter	H4F02ET

Audio/Multimedia and Communication Devices

Headsets

HP Reverb G2 Virtual Reality Headset	1N0T4AA
HP Reverb Virtual Reality Headset G2 (359V7AV)	428Z7AA
HP Stereo 3.5mm Headset G2	428H6AA
HP Stereo 3.5mm Headset G2	428K7AA
HP Stereo USB Headset G2	428H5AA
HP Stereo USB Headset G2	428K6AA

Speakers

HP S101 Speaker Bar	5UU40AA
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PC Controller/Controller Options

PC Processor Cards

Intel I225V Single Port 2.5GbE PCIe NIC	406L9AA
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HyperX Gaming Peripherals

HyperX Gaming Headsets

★ : Recommended

HyperX Cloud Headsets SC

HyperX Cloud Core + 7.1 - Gaming Headset (Black)	4P4F2AA
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HyperX Cloud Flight Headsets SC

HyperX Cloud Flight - Wireless Gaming Headset (Black-Red)	4P5L4AA
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HyperX Cloud Flight - Wireless Gaming Headset (Black-Red)	4P5L4AM
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HyperX Cloud MIX Headsets SC

HyperX Cloud MIX - Gaming Headset (Black-Gunmetal)	4P5K9AA
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HyperX Cloud Stinger Headsets SC

HyperX Cloud Stinger Core - Gaming Headset (Black)	4P4F4AA
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HyperX Microphones

HyperX SoloCast Microphones SC

HyperX SoloCast - USB Microphone (Black)	4P5P8AA
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