



HP Z8 Fury G5 Workstation (81R32UT)



Overview

Extreme performance. Infinite possibilities

Experience a new echelon in high performance. Transformative single socket technology delivers extreme performance with up to 56 cores in a single CPU, to also unleash the power of up to 4 high-end GPUs. Now you can breeze through even the most complex deep learning, virtual production, and VFX.

Relentless power. Extraordinary expandability

Tackle the most complex workflows with a next-gen Intel® W CPU, multiple GPUs, and loads of memory & storage.

Comprehensive security. Reliability you can trust

Trust the 360K hours of testing, certifications for pro apps, and world-class HP Wolf Security for Business[12].

Engineered to stay cool and quiet

Stay focused. Smart fan control keeps your PC whisper-quiet by tuning fan speeds using 20 temperature sensors.

Solutions for smarter workflows

Remotely access the power of your Z with HP Anyware[6] and get fast responsiveness and image quality even in high-end workflows. Save time with WSL 2[7], enabling Linux to run in Windows. Get easy access to tools from the Z by HP Data Science Stack Manager[8].

Features

Windows 11

Work anywhere without compromising on performance or security with Windows 11 powered by HP's collaboration and connectivity technology.

Intel® Xeon® W processor

Get optimized performance whether your professional application utilizes high core count or high frequency with the Intel® Xeon® W processor.^[1]

Security is your top priority

The HP Wolf Pro Security Edition provides preconfigured enterprise-level PC protection for small and medium sized businesses.

[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.

[6] Sold separately. HP Anyware requires network access. HP Anyware supports Windows®, Linux® and MacOS® host environments and Window, Linux, MacOS, iOS®, Android®, and Chrome OS® end-user devices. For more on the system requirements for installing HP Anyware, refer to the Admin Guides at: <https://docs.teradici.com/find/product/cloud-access-software> .

[7] Optional, configurable feature that must be configured at purchase. Requires Windows 10 or higher, Intel Core i5 processor or higher and is available on select Z workstations. You must be running Windows 10 version 21H2 and higher (Build 19044 and higher) or Windows 11.

[8] Z by HP Data Science Stack Manager requires Windows 10 version 21H2 (Build 19044) and higher or 64-bit Ubuntu 20.04 and is available on select Z workstations.

[12] HP Wolf Security for Business requires Windows 10 or 11 Pro or higher, includes various HP security features and is available on HP Pro, Elite and Workstation products. See product details for included security features and OS requirement.

Specifications

| | |
|--|--|
| Form factor | Tower |
| Operating system | Windows 11 Pro ^[1] |
| Processor family | Intel® Xeon® W processor |
| Processor | Intel® Xeon® W5-3425 (up to 4.6 GHz with Intel® Turbo Boost Technology, 30 MB L3 cache, 12 cores, 24 threads) ^[6,7] |
| Chipset | Intel® W790 |
| Memory | 16 GB DDR5-4800 MHz RAM (1 x 16 GB) |
| Memory Slots | 16 DIMM |
| Internal Storage | 512 GB PCIe® NVMe™ TLC M.2 SSD |
| Internal drive bays | Six PCIe® M.2 SSD; Six 3.5" HDD |
| External drive bays | Four NVMe™ M.2 SSD; Two 3.5" HDD; Two 9.5 mm ODD |
| Compatible displays | All HP Z Displays and HP DreamColor Displays are supported. For more information see http://www.hp.com/go/zdisplays |
| Audio | Realtek ALC3205-CG |
| Minimum dimensions (W x D x H) | 21.59 x 55.12 x 44.45 cm |
| Weight | Starting at 22 kg <i>(Exact weights depend upon configuration (System weight only))</i> |
| Keyboard | HP USB 320K Keyboard |
| Pointing device | HP Wired 320M Mouse |
| Ports | 2 SuperSpeed USB Type-C® 20Gbps signaling rate (USB Power Delivery); 2 SuperSpeed USB Type-A 5Gbps signaling rate; 1 headset/microphone combo ^[29] |
| Expansion slots | 1 PCIe 3 x8; 2 PCIe 5 x16; 1 PCIe 5 x4; 2 PCIe 4 x16; 2 PCIe 4 x4; 2 PCIe 4 x8 <i>(Rear bulkhead access can be achieved through all slots but 2 PCIe 4 x8 are internal access only for M.2.)</i> |
| Ports | 4 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo |
| Package dimensions (W x D x H) | 33.2 x 73.4 x 63.6 cm |
| Package weight | Starting at 27.95 kg |
| Management features | HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support |
| Sustainable impact specifications | Low Halogen; 40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; External power supply 90% efficiency; Plastic cushion inserts contain 80% recycled content; Ocean-bound plastic in system fan; 10% post-industrial recycled metal |
| Security management | Full volume encryption; HP Secure Erase; Kensington lock slot; Secure authentication; TPM 2.0 certified; HP BIOSphere; HP Sure Run; HP Sure Click; HP Sure Sense; HP Sure Admin; HP Platform Certificate; HP Sure Start; HP Sure Recover; Self-Encrypted Drives ^[20,21,22,23,24,25,26,27] |

Software included

HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Support Assistant; HP PC Hardware Diagnostics Windows; HP Image Assistant; HP Manageability Integration Kit; HP Anyware; HP Data Science Stack Manager^[17,18,19,33]

UPC number

(ABA) 197497260021; (ABC) 197497260038

Additional specifications

| | |
|-----------------------------------|---|
| Available software | HP Smart Support |
| ECC memory | non-ECC |
| Graphic card footnote number | [30] |
| Graphic card footnote number | [30] |
| Graphic card footnote number | [30] |
| I/O Port location | Front (Premium version) |
| I/O Port location | Front (Entry version) |
| 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 | DDR4 |
| 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 cache | 30 MB L3 |
| Processor core | 12 |
| Processor family | Xeon® W |

| | |
|--|--|
| Processor frequency technology | Intel® Turbo Boost Technology |
| Processor maximum frequency | 4.6 |
| Processor maximum frequency uom | GHz |
| Processor model | 3425 |
| Processor threads | 24 |
| Product long name specifications | HP Z8 Fury G5 Workstation, Windows 11 Pro, Intel® Xeon® W, 16GB RAM, 512GB SSD |
| Product short name specifications | HP Z8 Fury G5 Workstation, Intel® Xeon® W, 16GB RAM, 512GB SSD |
| Security Software Licenses | HP Wolf Pro Security Edition (1 year) |
| Standard memory note | Transfer rates up to 4800 MT/s. |
| Storage capacity | 512 |
| Storage capacity uom 01 | GB |
| Storage controller | Integrated SATA 6.0 Gb/s; Integrated RAID 0, 1 available for SATA drives |
| Storage form factor 01 | M.2 |
| Storage interface 01 | PCIe® |
| Storage interface protocol 01 | NVMe™ |
| Storage memory technology 01 | TLC |
| Storage speed 02 | 5400 |
| 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>.

[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.

[17] 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.html> .

[18] HP Support Assistant requires Windows and Internet access.

[19] HP Manageability Integration Kit can be downloaded from <http://www8.hp.com/us/en/ads/clientmanagement/overview.html> .

[20] HP Sure Click requires Windows 11 Pro or Enterprise. See https://bit.ly/2PrLT6A_SureClick for complete details.

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

[22] 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.

[23] 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.

[24] HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher.

[25] HP Sure Admin requires Windows 10 or higher, HP BIOS, HP Manageability Integration Kit from <http://www.hp.com/go/clientmanagement> and HP Sure Admin Local Access Authenticator smartphone app from the Android or Apple store.

[26] HP Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88.

[27] HP BIOSphere Gen6 features may vary depending on the platform and configurations.

[29] Front entry contain: 1 headset connector; 4 SuperSpeed USB Type-A 5Gbps signaling rate. Front Entry and Front Premium offer Battery Charging 1.2 through one of the USB Type-A ports.

[33] 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://www.hp.com/us-en/workstations/performanceadvisor.html> .

Disclaimer — Copyright

Intel, Core are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. AMD and Radeon are trademarks of Advanced Micro Devices, Inc. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. NVIDIA is trademark and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. USB Type-C® is registered trademarks of USB Implementers Forum. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. All other trademarks are the property of their respective owners.

© Copyright 2023 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.