

## HP Z2 Tower G5 Workstation (644C2UT)



### Our most powerful entry workstation that redefines expectations.

We've engineered a whole new level of performance for entry workstations, so you can cut through BIM, rendering and visualization projects without missing a beat. And when your demands change, you have impressive expandability to upgrade.



HP recommends Windows 11 Pro for business

#### **Your new benchmark for entry workstation power.**

Unleash the full power of professional graphics and Intel® processors on your compute-heavy workloads. We've designed the system for zero throttling, so your components always run at top speeds without ever overheating or slowing down.

#### **Built to expand. Power to grow.**

Need to swap graphics cards? Boost CPU power? Add specialized PCIe cards? Go for it. Our most expandable entry workstation is an investment that will last for years.

#### **We test it so you can trust it. 24/7.**

We know you need performance you can rely on. That's why our products endure over 360K hours of rigorous testing, MIL-STD testing[1] and software certifications.

### Featuring

#### **Intel® Core™ i9 processor**

Get high-end performance for intensive tasks like rendering and video editing with the Intel® Core™ i9 processor. [2]

#### **Security is your top priority**

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

#### **NVIDIA® Quadro® Graphics**

Experience high-end visualization and seamlessly render your biggest projects with the next generation NVIDIA® Quadro® T-Series graphics; Certified and supported for the apps you use every day.

#### **Smaller, Functional Design**

The stunning new design features front and rear ledges, so you can easily move your system from location to location.

## Specifications

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Form factor</b>                       | Tower                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Operating system</b>                  | Windows 11 Pro                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Processor family</b>                  | 10th Generation Intel® Core™ i9 processor                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Processor</b>                         | Intel® Core™ i9-10900 (2.8 GHz base frequency, up to 5.2 GHz with Intel® Turbo Boost Technology, 20 MB L3 cache, 10 cores) <sup>[6,7]</sup>                                                                                                                                                                                                                                                                                                               |
| <b>Chipset</b>                           | Intel® W480                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Memory</b>                            | 32 GB DDR4-3200 MHz RAM (2 x 16 GB)                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Memory Slots</b>                      | 4 DIMM                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Internal Storage</b>                  | 512 GB HP Z Turbo Drive PCIe® NVMe™ TLC SSD                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Internal drive bays</b>               | Two 3.5"; Two M.2 NVME 2280 SSD                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>External drive bays</b>               | One 5.25"                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Optical drive</b>                     | Not included                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Graphics</b>                          | Discrete                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Graphics (discrete)</b>               | NVIDIA® Quadro® T1000 (4 GB GDDR5 dedicated)                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Graphics</b>                          | Integrated                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Graphics (integrated)</b>             | Intel® UHD Graphics 630                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Compatible displays</b>               | All HP Z Displays and HP DreamColor Displays are supported.                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Audio</b>                             | Realtek ALC3205-VA2-CG, 2.0W internal mono speaker                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Minimum dimensions (W x D x H)</b>    | 35.6 x 16.9 x 38.5 cm<br>(Standard tower orientation.)                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Minimum dimensions (W x D x H)</b>    | 14 x 6.7 x 15.2 in<br>(Standard tower orientation.)                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Weight</b>                            | Starting at 7 kg<br>(Exact weight depends on configuration.)                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Weight</b>                            | Starting at 15.43 lb<br>(Exact weight depends on configuration.)                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Keyboard</b>                          | HP Wired Desktop 320K Keyboard                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Pointing device</b>                   | HP Wired 320M Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Ports</b>                             | 1 headphone/microphone combo; 2 SuperSpeed USB Type-A 10Gbps signaling rate; 2 SuperSpeed USB Type-A 5Gbps signaling rate                                                                                                                                                                                                                                                                                                                                 |
| <b>Expansion slots</b>                   | 1 PCIe 3 x4 (x16 connector); 1 PCIe 3 x16 (x16 connector); 1 M.2 2230 PCIe 3 x1; 2 M.2 2280 PCIe 3 x4; 2 PCIe® 3 x1 (x4 connector)<br>(1 M.2 slot for WLAN and 2 M.2 2230/2280 slot for storage.)                                                                                                                                                                                                                                                         |
| <b>Ports</b>                             | 1 audio-in; 1 audio-out; 1 RJ-45; 2 USB 2.0; 2 DisplayPort™ 1.4; 2 SuperSpeed USB Type-A 5Gbps signaling rate; 2 SuperSpeed USB Type-A 10Gbps signaling rate                                                                                                                                                                                                                                                                                              |
| <b>Sustainable impact specifications</b> | Low halogen                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Security management</b>               | HP Business PC Security Lock Kit; HP Keyed Cable Lock Kit; HP Solenoid Hood Lock and Sensor; HP UltraSlim Cable Lock Kit; HP Secure Erase; HP Sure Click; HP Sure Sense; HP Sure Start Gen6; HP Sure Run Gen3; HP Sure Recover Gen3; HP BIOSphere Gen6; HP Sure Admin; HP Client Security Manager Gen6 <sup>[15,22,24,25,26,27,28,29,32,34]</sup>                                                                                                         |
| <b>Software included</b>                 | HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Support Assistant; HP PC Hardware Diagnostics Windows; ZCentral Remote Boost; HP Image Assistant; HP Manageability Integration Kit <sup>[12,16,21,23]</sup>                                                                                                                                                                                                                                   |
| <b>UPC number</b>                        | 196548065332                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Manufacturer Warranty</b>             | Protected by HP, including a 3 year standard limited warranty. Optional HP Care Pack Services are extended service contracts that extend your protection beyond the standard warranties. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. For details, visit <a href="http://www.hp.com/go/cpc">www.hp.com/go/cpc</a> |

## Top Recommended Displays, Accessories and Services

### Z Displays

|                                 |         |
|---------------------------------|---------|
| HP Z32 31.5-inch 4K UHD Display | 1AA81AA |
|---------------------------------|---------|

### Keyboards

|                              |         |
|------------------------------|---------|
| HP Wireless Premium Keyboard | Z9N41AA |
|------------------------------|---------|

### Mice

|                           |         |
|---------------------------|---------|
| HP Wireless Premium Mouse | 1JR31AA |
|---------------------------|---------|

### Graphics Cards

|                                       |         |
|---------------------------------------|---------|
| AMD Radeon Pro WX 3200 4GB (4)mDP GFX | 6YT68AA |
|---------------------------------------|---------|

### DDR4 Memory

|                                   |         |
|-----------------------------------|---------|
| 32GB (1x32GB) 3200 DDR4 ECC UDIMM | 141H7AA |
| 16GB (1x16GB) 3200 DDR4 ECC UDIMM | 141H2AA |
| 8GB (1x8GB) 3200 DDR4 NECC UDIMM  | 141J4AA |

### Personal Systems Hardware Support Onsite Service

|                                                                          |        |
|--------------------------------------------------------------------------|--------|
| HP 4 year Next Business Day Response Onsite Workstation Hardware Support | U1G37E |
|--------------------------------------------------------------------------|--------|

### Personal Systems Commercial Care Pack Services

|                                                                                           |        |
|-------------------------------------------------------------------------------------------|--------|
| HP 4 year Active Care Next Business Day Response Onsite WorkstationHardware Support       | U22KBE |
| HP 5 year Active Care Next Business Day Resp Onsite w/Defective MediaRetention WS HW Supp | U22KGE |

## Messaging Footnotes

[1] 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 an optional HP Accidental Damage Protection Care Service.

[2] 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.

## Technical Specifications Footnotes

[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.

[12] 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 [hp.com/ZCentralRemoteBoost](http://hp.com/ZCentralRemoteBoost).

[15] HP Client Security Manager Gen6 requires Windows and is available on the select HP PCs.

[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.html>

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

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

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

[24] HP Client Security Manager Gen6 requires Windows and is available on the select HP PCs.

[25] HP Sure Click requires Windows 11 Pro or Windows 10 Pro or Enterprise. See [https://bit.ly/2PrLT6A\\_SureClick](https://bit.ly/2PrLT6A_SureClick) for complete details.

[26] HP Sure Start Gen 6 is available on select HP PCs and workstations. See product specifications for availability.

[27] HP Sure Run Gen3 is available on select Windows 11 or Windows 10 based HP Pro, Elite and Workstation PCs with select Intel® or AMD processors

[28] HP Sure Recover Gen3 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.

[29] 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

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

[34] HP Sure Admin requires Windows 11 or Windows 10, 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.

## Learn more at

[hp.com](http://hp.com)

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