#### ProductSheet

# HP Z6 G5 A Workstation (9J2K0UT)



# Maximized Cores. Astounding Graphics. Unbound Potential

The Z6 G5 A is a powerhouse for virtual production, 3D rendering, Al and machine learning. Its innovative system design, with a next-gen AMD Ryzen™ Threadripper™ PRO CPU.[1] combines an astounding number of cores in a single CPU with multiple GPUs.[2] Create and render at once on intensive projects.



Tear through virtual production, 3D modeling, AI and machine learning. The system design packs a staggering number of cores into a single workstation CPU[1] so there's room for multiple highend GPUs.[2] And do it all with efficient performance per watt.

#### Expandable. Flexible. Whisper Quiet

Designed to pack all the power and components you need now with room to grow. Get maximum expandability with large storage and memory configurations. Conquer intense projects with a device designed to run quiet and cool.

### Comprehensive security. Trusted reliability

Get peace of mind with a workstation that's built to endure. The Z6 G5 A undergoes 360K hours of rigorous testing, MIL-STD testing, [3] and is certified for pro apps. And with HP Wolf Security for Business, it's protected below, in, and above the OS.[4]

## **Featuring**

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

## AMD® Ryzen™ processor

Bring your ideas to life quickly and effectively with the latest AMD® Ryzen™ processors.

### Security is your top priority

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

## **HP Anyware**

Access the power of your Z from any device with HP Anyware—remote access software delivering fast responsiveness and image quality, even in film editing and data visualizations. [6]

# **Specifications**

Parenting system   Windows 11 Prof   1	Form factor	Tower
Processor family AMD Ryzen™ Threadripper™ PRO processor AMD Ryzen™ Threadripper™ Pro 7945WX (up to 5.3 GHz max boost clock, 64 MB L3 cache, 12 cores, 24 threads) (5.7) AME Memory 16 GB DDRS-5600 MHz ECC RAM (1 x 16 GB) Internal Storage 512 GB HP Z Turbo Drive PCle™ A.2 SSD Internal drive bays Two 3.5™ HDD; Four PCle™ A.2 SSD External drive bays Four NYMe™ M.2 SSD; One 9.5 mm ODD Graphics Discrete Graphics (discrete) NVIDLA™ T400 (4 GB GDDRG dedicated) Nuclio Realtex ALC 3205-CG Minimum dimensions (W x D x H) 6.65 x 18.3 x 17.5 in Weight Starting at 13.2 kg (Exact weight depends on configuration.) Keyboard HP USB 32 OK Keyboard Pointing device HP Wired Desktop 320M mouse Ports 1 USB Type-C* 20 Gbps signaling rate; 2 USB Type-A SGbps signaling rate; 1 headphone/microphone combo A PC Ex Starting at 22 sea a Chieve de through all slots, but 2 PCle 5 x4 and 2 PCle 4 x4 are internal access only for M.2.) Ports 4 USB Type-C* 20 Gbps signaling rate; 2 USB Type-A SGbps signaling rate; 1 headphone/microphone combo A PC Ex Starting 2 x 12 sea a Chieve de through all slots, but 2 PCle 5 x4 and 2 PCle 4 x4 are internal access only for M.2.) Ports 4 USB Type-A SGbps signaling rate; 1 Cle 4 xife; 3 PCle 5 xife; 3 PCle 5 xife; 3 PCle 5 xife; 3 PC	-	
Memory  16 GB DR5-5600 MHz ECC RAM (1 x 16 GB)  nternal Storage  51 2 GB H Z Turbo Drive PCIe® Cen4 TLC M.2 S 5D  nternal drive bays  Four NUME® M.2 S 5D; One 9.5 mm ODD  straphics  Discrete  Traphics Gliscrete)  NUDIA® T400 (4 GB GDDR6 dedicated)  Audio  Reatek ALC3205-CG  Idinimum dimensions (W x D x H)  16.9 x 46.5 x 44.5 cm  Minimum dimensions (W x D x H)  Starting at 13.2 kg  (Exact weight depends on configuration.)  Weight  Starting at 29.1 lb  (Exact weight depends on configuration.)  Weight  HP USB 320K Keyboard  H	Processor family	
Memory  16 GB DR5-5600 MHz ECC RAM (1 x 16 GB)  nternal Storage  51 2 GB H Z Turbo Drive PCIe® Cen4 TLC M.2 S 5D  nternal drive bays  Four NUME® M.2 S 5D; One 9.5 mm ODD  straphics  Discrete  Traphics Gliscrete)  NUDIA® T400 (4 GB GDDR6 dedicated)  Audio  Reatek ALC3205-CG  Idinimum dimensions (W x D x H)  16.9 x 46.5 x 44.5 cm  Minimum dimensions (W x D x H)  Starting at 13.2 kg  (Exact weight depends on configuration.)  Weight  Starting at 29.1 lb  (Exact weight depends on configuration.)  Weight  HP USB 320K Keyboard  H	Processor	AMD Ryzen™ Threadripper™ Pro 7945WX (up to 5.3 GHz max boost clock, 64 MB L3 cache, 12 cores, 24 threads) <sup>[6,7]</sup>
Two 3.5" HDD; Four PCIe® M.2 SSD  External drive bays  Four NVMe™ M.2 SSD; One 9.5 mm ODD  Graphics  Graphics  Discrete  NVDIA® T400 (4 GB GDDR6 dedicated)  Audio  Reattek ALC3205-CG  Minimum dimensions (W x D x H)  16.9 x 46.5 x 44.5 cm  Minimum dimensions (W x D x H)  Starting at 19.1 by  Weight  Starting at 19.1 by  Starting at 19.2 kg  (Exact weight depends on configuration.)  Weight  Starting at 29.1 by  Growth depends on configuration.)  Weight  HP USB 320K Keyboard  HP USB 320K Keyboard  Orbits  1 USB Type-6 20Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo  Expansion slots  4 PCIE 5 x16; 2 PCIE 5 x4; 1 PCIE 4 x16; 3 PCIE 4 x4  (Rear bulk/head access can be achieved through all slots, but 2 PCIE 5 x4 and 2 PCIE 4 x4 are internal access only for M.2.)  Ports  4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Dorts  4 USB Type-A 5Gbps signaling rate (1 charging)  Power  775 W internal power supply, up to 90% efficiency, active PFC  Ecolabels  ENERGY STAR® certified  ENERGY STAR® certified  HP Driver Packs; HP System Software Manager (download); HP BIDS Configuration Utility (download); HP Smart  Support  4 WP Driver Scotlands  Wanagement features  By Bost-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic  cushion inserts contain 80% recycled content, Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system included  Full volume encryption: HP Secure Erase; Kensington lock slot; Secure authentication; TPM 2.0 certified; HP  BIOSphere; HP Sure Run; HP Sure Click; HP Serve Sense; HP Sure Admin; HP Platform Certificat; HP Sure Start; HP Sure Rach; HP Services Scari, HP Data Science  Stack Manager 18, 19,20,311  HP Dri	Memory	
External drive bays Four NVMe™ M.2 SSD; One 9.5 mm ODD  Siraphics Discrete  Available Realtek ALC3205-CG  Minimum dimensions (W x D x H) 16.9 x 46.5 x 44.5 cm  Minimum dimensions (W x D x H) 6.65 x 18.3 x 17.5 in  Meight Starting at 13.2 kg (Exact weight depends on configuration.)  Meight Priver Packs; Alf SP yee-A 5Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo  Ports 1 USB Type-C® 206bps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo  A PCIES 3205 Xell yee-A 5Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo  A PCIES 316; 2 PCIES 3x 1; PCIE 4 x 16; 3 PCIE 4 x 4 (Rear bulkhead access can be archieved through all slots, but 2 PCIE 5 x 4 and 2 PCIE 4 x 4 are internal access only for M.2.)  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging)  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 4 USB	Internal Storage	512 GB HP Z Turbo Drive PCIe® Gen4 TLC M.2 SSD
Graphics Discrete  Audio Reater ALC 3205-CG  Minimum dimensions (W x D x H)  Minimum dimensions (W x D x H)  Minimum dimensions (W x D x H)  Meight Starting at 13.2 kg (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight (Exact weight depends on configuration weight depends on configuration.)  Meight (Exact weight depends on configuration utility (download); HP Smart subject on the configuration utility (download); HP Smart subject on the configuration weight depends on configuration and cPU fans  Meight (Exact weight depends on configuration weight depends on configuration weight depends on configuration weight depends on configuration and cPU fans  Meight (Exact weight depends on configuration weight depends on configuration weight depends on configuration weight depends on configuration and cPU fans  Meight (Exact weight depends on configuration dependence on configuration dependence on configuration weight depends on configuration wei	Internal drive bays	Two 3.5" HDD; Four PCIe® M.2 SSD
Audio Realtek ALC3205-CG  Minimum dimensions (W x D x H) 6.65 x 18.3 x 17.5 in  Weight Starting at 13.2 kg	External drive bays	Four NVMe™ M.2 SSD; One 9.5 mm ODD
Audio Realtek ALC3205-CG  Minimum dimensions (W x D x H)  16.9 x 46.5 x 44.5 cm  Minimum dimensions (W x D x H)  16.9 x 46.5 x 44.5 cm  Meight  Starting at 13.2 kg (Exact weight depends on configuration.)  Weight  Starting at 23.1 lb (Exact weight depends on configuration.)  Weight  HP USB 320K Keyboard  HP Wired Desktop 320M mouse  Ports  1 USB Type-C° 20Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo  4 PCIe 5 x 16; 2 PCIe 5 x 1; 1 PCIe 4 x 16; 3 PCIe 4 x 4 (Rear bulkhead access can be achieved through all slots, but 2 PCIe 5 x 4 and 2 PCIe 4 x 4 are internal access only for M.2.)  Ports  4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports  1 audio-in/out; 6 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  Power  775 W internal power supply, up to 90% efficiency, active PFC  Ecolabels  ENERGY STAR° certified  Management features  HP Driver Packs; HP System Software Manager (download); HP BIDS Configuration Utility (download); HP Smart Support  Usbion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; 1stre-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  Full volume encryption; HP Secure Erase; Kensington lock slot; Secure authentication; TPM 2.0 certified; HP Sure Recover; Self-Encrypted Drives [21222324225262728]  HP PC Hardware Diagnostics UEF; HP Performance Advisor; HP Support Assistant; HP Dct Hardware Diagnostics  Windows; HP Image Assistant; HP Manageability Integration Kit; HP Anyware; HP Services Scan; HP Data Science Stack Manager (18.19.20.31)	Graphics	Discrete
Minimum dimensions (W x D x H)  6.65 x 18.3 x 17.5 in  8 veight  Starting at 13.2 kg (Exact weight depends on configuration.)  8 veight  Starting at 29.1 lb (Exact weight depends on configuration.)  8 veight  Starting at 29.1 lb (Exact weight depends on configuration.)  8 veight  Starting at 29.1 lb (Exact weight depends on configuration.)  8 veyboard  HP USB 320K Keyboard  Pointing device  HP Wired Desktop 320M mouse  Ports  1 USB Type-C* 20Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo  4 PCle 5 x 16; 2 PCle 5 x4; 1 PCle 4 x 16; 3 PCle 4 x 4 (Rear bulkhead access can be achieved through all slots, but 2 PCle 5 x 4 and 2 PCle 4 x 4 are internal access only for M.2.)  Ports  4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  2 verb 1 audio-in/out; 6 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  2 verb 3 verb 4 USB Type-A 5Gbps signaling rate (1 charging)  2 verb 775 w internal power supply, up to 90% efficiency, active PFC  5 colabels  ENERGY STAR* certified  4 Nanagement features  4 USB Type-A 5Gbps signaling rate (1 charging)  4 Verb 5 x 4 verb 6 verb 7 x 5 w internal power supply, up to 90% efficiency, active PFC  5 colabels  ENERGY STAR* certified  4 Nanagement features  4 Verb 7 x 10 verb 7 x 10 x	Graphics (discrete)	NVIDIA® T400 (4 GB GDDR6 dedicated)
Meight Starting at 13.2 kg (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Starting at 29.1 lb (Exact weight depends on configuration.)  Meight Start Net 2 PCle 5 x4 and 2 PCle 4 x4  Are internal power supply and 2 PCle 4 x4  Are internal power supply and 2 PCle 4 x4 are internal power supply 90% efficiency; Ocean-bound plastic inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic inserts contain 80% recycled content; Molded paper pu	Audio	Realtek ALC3205-CG
Starting at 13.2 kg   (Exact weight depends on configuration.)	Minimum dimensions (W x D x H)	16.9 x 46.5 x 44.5 cm
Starting at 29.1 lb     Starting at 29.1 lb     (Exact weight depends on configuration.)   Steyboard	Minimum dimensions (W x D x H)	6.65 x 18.3 x 17.5 in
(Exact weight depends on configuration.)  (Reyboard HP USB 320K Keyboard HP Wired Desktop 320M mouse 1 USB Type-C* 20Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo 4 PCle 5 x16; 2 PCle 5 x4; 1 PCle 4 x16; 3 PCle 4 x4 (Rear bulkhead access can be achieved through all slots, but 2 PCle 5 x4 and 2 PCle 4 x4 are internal access only for M.2.)  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo 4 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  Ports 1 audio-in/out; 6 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  Power 775 W internal power supply, up to 90% efficiency, active PFC 4 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  Rergy star certified ENERGY STAR® certified ENERGY STAR® certified ENERGY STAR® certified HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support 40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  Full volume encryption; HP Secure Erase; Kensington lock slot; Secure authentication; TPM 2.0 certified; HP BIOS phere; HP Sure Run; HP Sure Start; HP Sure Start; HP Sure Recover; Self-Encrypted Drives [21:22:23:24,25:26:27.28]  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 Services Scan; HP Data Science Stack Manager [18:19:20.31]	Weight	
Ports 1 USB Type-C® 20Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo  A PCIe 5 x16; 2 PCIe 5 x4; 1 PCIe 4 x16; 3 PCIe 4 x4  (Rear bulkhead access can be achieved through all slots, but 2 PCIe 5 x4 and 2 PCIe 4 x4 are internal access only for M.2.)  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 1 audio-in/out; 6 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  Ports 4 USB Type-A 5Gbps signaling rate (1 charging)  Power 775 W internal power supply, up to 90% efficiency, active PFC  Cicolabels ENERGY STAR® certified  Management features  HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  Full volume encryption; HP Secure Erase; Kensington lock slot; Secure authentication; TPM 2.0 certified; HP BIOSphere; HP Sure Run; HP Sure Elick; HP Sure Sense; HP Sure Admin; HP Platform Certificate; HP Sure Recover; Self-Encrypted Drives [21.22.23.24,25.26.27.28]  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 Services Scan; HP Data Science Stack Manager [18.19.20,31]	Weight	
Ports 1 USB Type-C® 20Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo  4 PCle 5 x16; 2 PCle 5 x4; 1 PCle 4 x16; 3 PCle 4 x4 (Rear bulkhead access can be achieved through all slots, but 2 PCle 5 x4 and 2 PCle 4 x4 are internal access only for M.2.)  Ports 4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 1 audio-in/out; 6 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  Ports 4 USB Type-A 5Gbps signaling rate (1 charging)  Power 775 W internal power supply, up to 90% efficiency, active PFC  Colabels ENERGY STAR® certified  Management features HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  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 [21.22.23.24,25.26.27.28]  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 Services Scan; HP Data Science Stack Manager [18,19.20.31]	Keyboard	HP USB 320K Keyboard
A PCIe 5 x16; 2 PCIe 5 x4; 1 PCIe 4 x16; 3 PCIe 4 x4 (Rear bulkhead access can be achieved through all slots, but 2 PCIe 5 x4 and 2 PCIe 4 x4 are internal access only for M.2.)  4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo  Ports 1 audio-in/out; 6 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  Power 775 W internal power supply, up to 90% efficiency, active PFC  Ecolabels ENERGY STAR® certified  Management features HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  Full volume encryption; HP Secure Erase; Kensington lockslot; Secure authentication; TPM 2.0 certified; HP BIOSphere; HP Sure Recover; Self-Encrypted Drives <sup>[21,22,23,24,25,26,27,28]</sup> 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 Services Scan; HP Data Science Stack Manager <sup>[18,19,20,31]</sup>	Pointing device	HP Wired Desktop 320M mouse
Rear bulkhead access can be achieved through all slots, but 2 PCle 5 x4 and 2 PCle 4 x4 are internal access only for M.2.)   Ports	Ports	1 USB Type-C® 20Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo
Ports 1 audio-in/out; 6 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)  Ports 4 USB Type-A 5Gbps signaling rate (1 charging)  Power 775 W internal power supply, up to 90% efficiency, active PFC  Ecolabels ENERGY STAR® certified  Energy star certified ENERGY STAR® certified  Management features HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  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 [21,22,23,24,25,26,27,28]  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 Services Scan; HP Data Science Stack Manager [18,19,20,31]	Expansion slots	(Rear bulkhead access can be achieved through all slots, but 2 PCle 5 x4 and 2 PCle 4 x4 are
Power 775 W internal power supply, up to 90% efficiency, active PFC  Ecolabels ENERGY STAR® certified  Energy star certified ENERGY STAR® certified  Management features HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  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 [21.22,23,24,25,26,27,28]  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 Services Scan; HP Data Science Stack Manager [18,19,20,31]	Ports	4 USB Type-A 5Gbps signaling rate (1 charging); 1 headphone/microphone combo
Power 775 W internal power supply, up to 90% efficiency, active PFC  Ecolabels ENERGY STAR® certified  Energy star certified ENERGY STAR® certified  Management features HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  Full volume encryption; HP Secure Erase; Kensington lock slot; Secure authentication; TPM 2.0 certified; HP BIOSphere; HP Sure Run; HP Sure Sense; HP Sure Admin; HP Platform Certificate; HP Sure Recover; Self-Encrypted Drives [21,22,23,24,25,26,27,28]  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 Services Scan; HP Data Science Stack Manager [18,19,20,31]	Ports	1 audio-in/out; 6 USB Type-A 5Gbps signaling rate; 1 RJ-45 (1 GbE)
Energy star certified  ENERGY STAR® certified  Management features  HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  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 Recover; Self-Encrypted Drives [21,22,23,24,25,26,27,28]  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 Services Scan; HP Data Science Stack Manager [18,19,20,31]	Ports	4 USB Type-A 5Gbps signaling rate (1 charging)
Energy star certified  Management features  HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  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 [21,22,23,24,25,26,27,28]  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 Services Scan; HP Data Science Stack Manager [18,19,20,31]	Power	775 W internal power supply, up to 90% efficiency, active PFC
HP Driver Packs; HP System Software Manager (download); HP BIOS Configuration Utility (download); HP Smart Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  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 [21,22,23,24,25,26,27,28]  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 Services Scan; HP Data Science Stack Manager [18,19,20,31]	Ecolabels	ENERGY STAR® certified
Support  40% post-consumer recycled plastic; 25% ITE-derived closed loop plastic; Bulk packaging available; Plastic cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  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 [21,22,23,24,25,26,27,28]  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 Services Scan; HP Data Science Stack Manager [18,19,20,31]	Energy star certified	ENERGY STAR® certified
cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in system and CPU fans  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 <sup>[21,22,23,24,25,26,27,28]</sup> 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 Services Scan; HP Data Science Stack Manager <sup>[18,19,20,31]</sup>	Management features	
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 <sup>[21,22,23,24,25,26,27,28]</sup> 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 Services Scan; HP Data Science Stack Manager <sup>[18,19,20,31]</sup>	Sustainable impact specifications	cushion inserts contain 80% recycled content; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic; Internal power supply 90% efficiency; Ocean-bound plastic in
Software included Windows; HP Image Assistant; HP Manageability Integration Kit; HP Anyware; HP Services Scan; HP Data Science Stack Manager <sup>[18,19,20,31]</sup>	Security management	BIOSphere; HP Sure Run; HP Sure Click; HP Sure Sense; HP Sure Admin; HP Platform Certificate; HP Sure Start; HP
	Software included	Windows; HP Image Assistant; HP Manageability Integration Kit; HP Anyware; HP Services Scan; HP Data Science
JPC number (ABA) 197961633016; (ABC) 197961633009	UPC number	(ABA) 197961633016; (ABC) 197961633009

# **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. AMD's numbering is not a measurement of clock speed.
- [2] Graphics are sold separately or as an optional feature.
- [3] Testing is not intended to demonstrate fitness of U.S. Department of Defense (DoD) 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 Pack.
- [4] HP Wolf Security for Business requires Windows 10 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 0S requirement.
- [6] Network access required. HP Anyware software and licensing are available through a 1- or 3-year subscription. Renewal is required after the subscription term. HP Anyware subscriptions are based on the number of concurrent PCoIP connections used (pay for the number of host connections, not the software) with a minimum order quantity of 5. For a limited time, an HP Anyware Professional subscription also includes access and support for ZCentral Remote Boost and ZCentral Connect and is available for purchase through an HP reseller or contact sales at hp.com/Anyware. ZCentral Remote Boost Sender requires Windows 10 and 11, RHEL/CentOS (7 or 8), or UBUNTU 18.04 or 20.04 LTS operating systems. macOS (10.14 or newer) operating system and ThinPro 7.2 are only supported on the receiver side. ZCentral Connect requires Windows (10 or 11) or Windows Server (2016 or 2019) operating system, Microsoft Active Directory and Intel Active Management Technology for select features. For system requirements and to install HP Anyware and Anyware Manager, refer to the Admin Guides at: https://docs.teradici.com/find/product/hp-anyware.

#### **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.
- [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. AMD's numbering is not a measurement of clock speed.
- [7] Max Boost clock frequency performance varies depending on hardware, software and overall system configuration.
- [18] 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.
- [19] HP Support Assistant requires Windows and Internet access.
- [20] HP Manageability Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html .
- [21] HP Sure Click requires Windows 11 Pro or Enterprise. See https://bit.ly/2PrLT6A\_SureClick for complete details.
- [22] HP Sure Start Gen7 is available on select HP PCs and Workstations. See product specifications for availability.
- [23] 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.
- [24] 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.
- [25] HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher.
- [26] 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.
- [27] HP Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88.
- $\hbox{\hbox{$\tt [28]$ HP BIOSphere Gen6 features may vary depending on the platform and configurations.}}$
- [31] HP Services Scan is provided with Windows Update on select products and will check entitlement on each hardware device to determine if an HP TechPulse-enabled service has been purchased, and will download applicable software automatically. HP TechPulse is a telemetry and analytics platform that provides critical data around devices and applications. For full system requirements or to disable this feature, please visit http://www.hpdaas.com/requirements . Not applicable in China.

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