

HP ZBook Power 15.6 inch G9 Mobile Workstation PC Specifications Table



*Product image may differ from actual product

Available Operating Systems	Windows 11 Pro ¹ Windows 11 Pro Education ¹ Windows 11 Home – HP recommends Windows 11 Pro for business ¹ Windows 11 Home Single Language – HP recommends Windows 11 Pro for business ¹ FreeDOS 3.0
Processor family ^{2,3,4,5,25}	12th Generation Intel® Core™ i5 processor; 12th Generation Intel® Core™ i7 processor; 12th Generation Intel® Core™ i9 processor
Available Processors ^{2,3,4,5,16,25}	Intel® Core™ i9-12900HK with Intel® UHD Graphics (1.8 GHz E-core base frequency, 2.5 GHz P-core base frequency, up to 3.8 GHz E-core Max Turbo frequency, up to 5.0 GHz P-core Max Turbo frequency, 24 MB L3 cache, 6 P-cores and 8 E-cores, 20 threads); Intel® Core™ i9-12900H with Intel® UHD Graphics (1.8 GHz E-core base frequency, 2.5 GHz P-core base frequency, up to 3.8 GHz E-core Max Turbo frequency, up to 5.0 GHz P-core Max Turbo frequency, 24 MB L3 cache, 6 P-cores and 8 E-cores, 20 threads), supports Intel® vPro® Technology; Intel® Core™ i7-12800H with Intel® UHD Graphics (1.8 GHz E-core base frequency, 2.4 GHz P-core base frequency, up to 3.7 GHz E-core Max Turbo frequency, up to 4.8 GHz P-core Max Turbo frequency, 24 MB L3 cache, 6 P-cores and 8 E-cores, 20 threads), supports Intel® vPro® Technology; Intel® Core™ i7-12700H with Intel® UHD Graphics (1.7 GHz E-core base frequency, 2.3 GHz P-core base frequency, up to 3.5 GHz E-core Max Turbo frequency, up to 4.7 GHz P-core Max Turbo frequency, 24 MB L3 cache, 6 P-cores and 8 E-cores, 20 threads), supports Intel® vPro® Technology; Intel® Core™ i5-12600H with Intel® UHD Graphics (2.0 GHz E-core base frequency, 2.7 GHz P-core base frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.5 GHz P-core Max Turbo frequency, 18 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads), supports Intel® vPro® Technology; Intel® Core™ i5-12500H with Intel® UHD Graphics (1.8 GHz E-core base frequency, 2.5 GHz P-core base frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.4 GHz P-core Max Turbo frequency, 18 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads)
Maximum memory	64 GB DDR5-4800 non-ECC SDRAM ⁷ Transfer rates up to 4800 MT/s.
Memory slots	2 SODIMM; supports dual channel ^{8,9,10}
Internal storage	256 GB up to 4 TB PCIe® Gen4 NVMe™ M.2 SSD ^{11,52} 256 GB up to 512 GB PCIe® Gen4 NVMe™ M.2 SED SSD ¹¹ up to 8 TB PCIe® Gen4 x2 NVMe™ ¹¹
Display size (diagonal, metric)	39.6 cm (15.6")
Display	15.6" diagonal, FHD (1920 x 1080), touch, IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 15.6" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 400 nits, low power, 100% sRGB; 15.6" diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 15.6" diagonal, 4K UHD (3840 x 2160), IPS, narrow bezel, anti-glare, 400 nits, low power, 100% sRGB ^{14,21,23,24} 39.6 cm (15.6") diagonal, FHD (1920 x 1080), touch, IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), touch, IPS, narrow bezel, anti-reflection Corning® Gorilla® Glass 5, 250 nits, 45% NTSC; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 400 nits, low power, 100% sRGB; 39.6 cm (15.6") diagonal, 4K UHD (3840 x 2160), IPS, narrow bezel, anti-glare, 400 nits, low power, 100% sRGB ^{14,21,23,24}
Available Graphics	Integrated: Intel® Iris® Xe Graphics ^{16,32} Discrete: NVIDIA RTX™ A1000 Laptop GPU (4 GB GDDR6 dedicated); NVIDIA RTX™ A2000 Laptop GPU (8 GB GDDR6 dedicated); NVIDIA® T600 Laptop GPU (4 GB GDDR6 dedicated) (Discrete graphics options planned to be available at a later date and require factory configuration at the time of hardware purchase.)
Audio	HP Audio, dual stereo speakers, dual array digital microphones, functions keys for volume up and down, combo microphone/headphone jack, HD audio ⁴⁵
Memory card device	1 smart card reader (select models)
Ports and Connectors	Left side: 2 SuperSpeed USB Type-A 5Gbps signaling rate (charging) ⁶ ; Right side: 1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 3 SuperSpeed USB Type-A 5Gbps signaling rate (charging) ^{28,55}
Input devices	HP Premium Quiet Keyboard, spill-resistant, full-size, backlit, keyboard with a Programmable Key and numeric keypad; ClickPad Mylar with multi-touch gesture support, taps enabled as default; Microsoft Precision Touchpad with gesture support;
Communications	LAN: Intel® I219-LM GbE, vPro®; Intel® I219-V GbE, non-vPro®; WLAN: Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 M.2 combo, vPro®; Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 M.2 combo, non-vPro® ^{12,13} ; NFC Miracast WNC XR4V-1
Camera	720p HD camera; 720p HD IR camera ^{17,18}
Software	Bing search for IE11; Buy Office; HP Hotkey Support; HP Performance Advisor; HP Recovery Manager; HP Remote Graphics Software; HP Support Assistant; HP JumpStart; Native Miracast support; HP Connection Optimizer; HP Cloud Recovery; HP Admin; HP Privacy Settings; HP QuickDrop; HP Easy Clean; HP PC Hardware Diagnostics; HP ZCentral Remote Boost 2020 Software for Z workstation; Tile™ Application; HP Auto Lock and Awake; ^{15,26,35,59}
Available software	HP Smart Support ⁴³
Security management	Absolute persistence module; HP Device Access Manager; HP Power On Authentication; HP Security Manager; Integrated smart card reader; Master Boot Record security; Pre-boot authentication; HP Sure Click; Windows Defender; HP Secure Erase; HP Manageability Integration Kit; HP Sure Sense; HP Secure Platform; HP Sure Recover Gen3; HP BIOSphere Gen6; HP Sure Start Gen6; HP Sure Run Gen3; HP Tamper Lock; Nano Security Lock Slot; HP Client Security Suite Gen7; Trusted Platform Module TPM 2.0; Windows Secured Core; ^{19,22,27,30,31,34,38,47,49,50,53}
Security Software Licenses	HP Wolf Pro Security Edition ⁵⁶
Fingerprint reader	Fingerprint reader (select models)
Management features	HP Power Manager ³³
Power	120 W Slim Smart external AC power adapter; 150 W Slim Smart external AC power adapter ²⁰
Battery type	HP Long Life 6-cell, 83 Wh Li-ion polymer ^{37,40}
Battery life	Up to 18 hours
Dimensions	14.15 x 9.21 x 0.9 in; 35.94 x 23.39 x 2.28 cm
Weight	Starting at 4.25 lb; Starting at 1.93 kg. (Weight varies by configuration and components.)
Ecolabels	EPEAT® registered configurations available ⁴¹
Energy star certified (series fixed)	ENERGY STAR® certified
Sustainable Impact specifications	Low Halogen ⁴²
Warranty	3 year (3/3/0) limited warranty includes 3 years of parts and labor. No on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply.