HP ZBook Studio 15.6 inch G8 Mobile Workstation (680Y9UT)

Power to free the creative mind

From keyboard to screen, every aspect of our ZBook Studio is designed for performance workflows. Render or visualize in real time, collaborate remotely, and even game from anywhere. With all this power engineered into such a small package, finally, there's one device for everything you do.

HP recommends Windows 11 Pro for business

Power-packed for the work you do
With NVIDIA® graphics and Intel® Core™ processors you can animate in seconds and render or visualize in real time. Plus, with ZCentral Remote Boost you can share this power with teammates when they need a boost.[2]

Thin, light and designed to perform anywhere
At less than 4lbs,[5] with long-lasting battery life and built-in noise suppression, this sleek PC is designed so you can work and game from anywhere. Need to stay in the zone? Speakers custom tuned by Bang and Olufsen surround you in rich audio.

A work laptop you'll want to game on
Go ahead—work and game on the same laptop with the performance of Z and the power of NVIDIA® graphics. Whether you're rendering in 3D or trying out the latest title, now nothing will slow you down.

Featuring

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

15.6" (39.6 cm) Diagonal 4K UHD DreamColor Display
Create with industry-leading HP DreamColor technology. With 1 billion possible colors and remarkable precision, what you see is what you get—great depth, flawless accuracy and sharp detail. Customize your color space or easily switch between AdobeRGB, sRGB and DCI-P3.

HP Z Turbo Drive High-speed Storage
Work without limits in any location with local PCIe storage that's up to 6x faster than SATA SSD, and up to 21x faster than traditional HDD storage. [3]

HP Fast Charge
Ultra-fast recharge takes you from zero to 50% charge in just 30 minutes. [4]

Industry-leading security features
Advanced security features come standard. System safeguards like HP Sure Start – the industry's first self-healing BIOS – mean your device is locked down tight, so your data and identity are too.

Specifications

Operating system	Windows 11 Pro
Processor family	11th Generation Intel® Core™ i7 processor
Processor	Intel® Core™ i7-11800H (up to 4.6 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 8 cores)
Memory	32 GB DDR4-3200 MHz RAM (onboard)
Internal Storage	512 GB PCIe® NVMe™ M.2 SSD
Memory card device	1 SD 7.0 media card reader
Optical drive	Not included
Graphics	Discrete
Graphics (discrete)	NVIDIA® T1200 (4 GB GDDR6 dedicated)
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics
Display	39.6 cm (15.6") diagonal, 4K UHD (3840 x 2160), anti-glare, 600 nits, 100% DCI-P3, HP DreamColor
Display	15.6" diagonal, 4K UHD (3840 x 2160), anti-glare, 600 nits, 100% DCI-P3, HP DreamColor[7,15,16,25,27,29]
Display size (diagonal)	39.6 cm (15.6")
Display size (diagonal)	15.6"
Audio	Audio by Bang & Olufsen, stereo speakers (2 tweeters & 2 woofers), HP World Facing Microphone dual array digital microphones, functions keys for volume up and down, combo microphone/headphone jack, HD audio with 150Hz Bass Roll off
Minimum dimensions (W x D x H)	35.4 x 23.46 x 1.79 cm (non-touch); 35.4 x 23.46 x 1.75 cm (touch)
Minimum dimensions (W x D x H)	13.93 x 9.24 x 0.70 in (non touch); 13.93 x 9.24 x 0.69 in (touch)
Weight	Starting at 1.79 kg *(Weight varies by configuration and components.)*
Weight	Starting at 3.96 lb *(Weight varies by configuration and components.)*
Keyboard	HP RGB Keyboard - Full-size, per-key RGB backlit keyboard
Pointing device	ClickPad Glass with multi-touch gesture support, taps enabled as default
Camera	720p HD IR privacy camera with integrated dual array microphones
Ports	1 headphone/microphone combo; 1 SuperSpeed USB Type-A 5Gbps signaling rate (charging); 1 nano security lock slot[12,13] *(Mini Displayport and HDMI restrictions to Graphics cards are noted in Footnote54 and Footnote56)*
Ports	1 power connector; 1 Mini DisplayPort™ 1.4; 2 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 HDMI 2.1
Wireless	Intel® Wi-Fi CERTIFIED 6™ AX201 (2x2) and Bluetooth® 5 combo (Supporting Gigabit data rate)
Power	150 W Slim Smart external AC power adapter[48]
Battery type	HP Long Life 6-cell, 83 Wh Li-ion polymer
Battery recharge time	Supports battery HP fast charge: approximately 50% in 30 minutes
Sustainable impact specifications	Low halogen
Security management	Absolute persistence module; HP Device Access Manager; HP Power On Authentication; Trusted Platform Module TPM 2.0 Embedded Security Chip; Master Boot Record security; Pre-boot authentication; HP Sure Click; Windows Defender; HP Secure Erase; HP Manageability Integration Kit; HP Sure Sense; HP BIOSphere Gen6; HP Sure Start Gen6; HP Sure Admin; HP Image Assistant; MS Bitlocker Encryption; Nano Security Lock Slot; HP Sure Recover Gen4; HP Sure Run Gen4; HP Client Security Manager Gen7; HP Sure Recover Gen4 with Embedded Reimaging[34,35,36,37,38,39,40,41,42,43,49]
Software included	Bing search for IE11; Buy Office; HP Hotkey Support; HP Noise Cancellation Software; HP Performance Advisor; HP Support Assistant; Native Miracast support; HP Connection Optimizer; HP Privacy Settings; HP QuickDrop; Data Science Stack; HP Easy Clean; HP PC Hardware Diagnostics; HP ZCentral Remote Boost 2020 Software for Z workstation; Tile™ Application; Windows 10 Cloud Recovery Client; 1-month Adobe® free trial offer[30,33,51,55,57,58]
UPC number	(ABA) 196548412006; (ABL) 196548411993

Top Recommended Displays, Accessories and Services

Z Displays

HP Z27q G3 QHD Display	1C4Z7AA
HP Z24f G3 FHD Display	3G828AA
HP Z24n G3 WUXGA Display	1C4Z5AA

Docking Stations

HP Thunderbolt Dock G2 with Combo Cable	3TR87AA

Cases

HP Renew Business 15.6-inch Laptop Bag	3E5F8AA
HP Executive 15.6 Top Load	6KD06AA

Backpacks

HP Executive 15.6 Backpack	6KD07AA

Keyboard and Mouse Kits

HP Wireless Rechargeable 950MK Mouse and Keyboard	3M165AA

Mice

HP 635 Multi-Device Wireless Mouse	1D0K2AA

AC Adapters

HP 150W Slim Smart AC Adapter (4.5mm)	4SC18AA

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. Intel's numbering, branding and/or naming is not a measurement of higher performance.

[2] HP ZCentral Remote Boost Sender does not come preinstalled on Z Workstations but can be downloaded and run on all Z desktop and laptops without license purchase through 2022. 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. ZCentral Remote Boost Sender for non-Z Hardware requires a license and Windows 10, 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. Requires network access. The software is available for download at hp.com/ZCentralRemoteBoost.

[3] For hard drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30GB (for Windows 10) of system disk is reserved for system recovery software.

[4] Recharges the battery up to 50% within 30 minutes when the system is off or in standby mode. Power adapter with a minimum capacity of 65 watts is required. After charging has reached 50% capacity, charging will return to normal. Charging time may vary +/-10% due to System tolerance.

[5] Starting at weight. Weight will vary with configuration.

Technical Specifications Footnotes

[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] HDMI 2.0 works with Discrete Graphics and Intel(r) Iris Xe Graphics. Note: For Nvidia Discrete Gfx, it can support HDMI 2.1 except GPU of QN20-P1 SKU(HDMI2.0 support).

[13] HDMI 2.0 connector is provided with Intel® UHD Graphics and/or NVIDIA Quadro T1000 or T2000 configurations; miniDP 1.4 connector is provided with NVIDIA Quadro RTX 3000 or higher configurations

[15] UHD content required to view UHD images.

[16] HD content required to view HD images.

[25] HP Sure View is optional and must be configured at purchase. It operates in landscape orientation.

[27] Display options may be limited to specific CPU / GPU Configurations.

[29] Resolutions are dependent upon monitor capability, and resolution and color depth settings.

[30] HP ZCentral Remote Boost Sender does not come preinstalled on Z Workstations but can be downloaded and run on all Z desktop and laptops without license purchase through 2022. 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. ZCentral Remote Boost Sender for non-Z Hardware requires a license and Windows 10, 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. Requires network access. The software is available for download at hp.com/ZCentralRemoteBoost.

[33] HP Connection Optimizer requires Windows 10.

[34] HP BIOSphere Gen6 requires Windows 10 and is available on select HP Pro and Elite PCs. Features may vary depending on the platform and configurations

[35] Absolute agent is shipped turned off, and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: http://www.absolute.com/company/legal/agreements/computrace-agreement . Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software.

[36] HP Sure Run Gen4 is available on select HP PCs and requires Windows 10.

[37] HP Manageability Integration Kit can be downloaded from http://www.hp.com/go/clientmanagement .

[38] Security lock slot is Lock sold separately.

[39] HP Client Security Manager Gen7 requires Windows and is available on the select HP Elite and Pro PCs.

[40] HP Sure Recover Gen4 is available on select HP PCs and requires Windows 10 and an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data. Network based recovery using Wi-Fi is only available on PCs with Intel Wi-Fi Module.

[41] HP Sure Recover Gen4 with Embedded Reimaging is an optional feature which requires Windows 10 must be configured at purchase. You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Network based recovery using Wi-Fi is only available on PCs with Intel Wi-Fi Module.