

# HP ZBook Firefly 16 inch G9 Mobile Workstation PC Wolf Pro SecurityEdition (6Q412UT)



**Step up performance. Not size.**

Pro-level performance combines with true mobility in this amazingly sleek and powerful laptop. Stay productive wherever you're working with integrated or discrete graphics and processor, AI-enhancing webcam and audio, and a stunning display—everything you need to collaborate and manage projects anywhere.



HP recommends Windows 11 Pro for business.

## Upgrade to pro-level performance

Say goodbye to lags and crashes with faster responsiveness on projects. With Intel® processors<sup>[1]</sup> and integrated or discrete graphics you can open large files and run pro apps simultaneously for speedy multitasking and productivity.

## Work all day. Anywhere.

Starting at 3.97 lbs.<sup>[4]</sup> our most mobile ZBook is made to move. With up to 13-hours of battery life,<sup>[5]</sup> this sleek yet durable device is small enough to fit in your bag so you can stay productive anywhere. This is high performance workstation power on the go.

## Connect. Communicate. Collaborate.

Collaborate effectively with ZBook Firefly. The AI enhanced auto-framing 5MP camera<sup>[6]</sup> offers improved image quality even in low light, and discrete audio amps block background noise so you can connect from any location with a more personal experience.

## Featuring

### Intel® Core™ i7 processor

Run several CPU-heavy programs simultaneously without sacrificing performance with an Intel® Core™ i7 processor. <sup>[3]</sup>

### 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. <sup>[7]</sup>

### HP Fast Charge

Ultra-fast recharge takes you from zero to 50% charge in just 30 minutes. <sup>[8]</sup>

### Spill-resistant Keyboard

Accidents happen - which is why we designed our keyboard with a drain hole, so minor spills flow out the bottom for easy cleanup.

### 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

<b>Operating system</b>	Windows 10 Pro (available through downgrade rights from Windows 11 Pro) <sup>[1]</sup>
<b>Processor family</b>	12th Generation Intel® Core™ i7 processor
<b>Processor</b>	Intel® Core™ i7-1270P (up to 4.8 GHz with Intel® Turbo Boost Technology, 18 MB L3 cache, 12 cores, 16 threads)
<b>Processor technology</b>	Intel® Core™ i7 with vPro™ Technology
<b>Chipset</b>	Intel® Integrated SoC
<b>Memory</b>	16 GB DDR5-4800 MHz RAM (2 x 8 GB)
<b>Memory Slots</b>	2 SODIMM; supports dual channel
<b>Internal Storage</b>	512 GB PCIe® NVMe™ TLC SSD
<b>Optical drive</b>	Not included
<b>Graphics</b>	Integrated
<b>Graphics (integrated)</b>	Intel® Iris® X <sup>e</sup> Graphics
<b>Display</b>	40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, narrow bezel, anti-glare, 400 nits, 100% sRGB
<b>Display</b>	16" diagonal, WUXGA (1920 x 1200), IPS, narrow bezel, anti-glare, 400 nits, 100% sRGB <sup>[11,33,36,37]</sup>
<b>Display size (diagonal)</b>	40.6 cm (16")
<b>Display size (diagonal)</b>	16"
<b>Audio</b>	Audio by Bang & Olufsen, dual stereo speakers, HP World Facing Microphone dual array digital microphones, functions keys for volume up and down, combo microphone/headphone jack, HD audio
<b>Minimum dimensions (W x D x H)</b>	35.87 x 25.09 x 1.99 cm
<b>Minimum dimensions (W x D x H)</b>	14.12 x 9.87 x 0.78 in
<b>Weight</b>	Starting at 1.8 kg (Weight varies by configuration and components.)
<b>Weight</b>	Starting at 3.97 lb (Weight varies by configuration and components.)
<b>Keyboard</b>	HP Premium Keyboard – spill-resistant, full-size, backlit keyboard with numeric keypad
<b>Camera</b>	5MP HD IR camera
<b>Ports</b>	1 SuperSpeed USB Type-A 5Gbps signaling rate (charging); 1 HDMI 2.0b; 2 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge)
<b>Ports</b>	1 headphone/microphone combo; 1 SuperSpeed USB Type-A 5Gbps signaling rate
<b>Wireless</b>	Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)
<b>Power</b>	65 W USB Type-C™ adapter
<b>Battery type</b>	HP Long Life 3-cell, 51 Wh Li-ion polymer
<b>Battery recharge time</b>	Supports battery fast charge: approximately 50% in 30 minutes
<b>Management features</b>	HP Power Manager <sup>[20]</sup>
<b>Sustainable impact specifications</b>	Ocean-bound plastic in speaker enclosure; 40% post-consumer recycled plastic; External power supply 90% efficiency; Low Halogen; Bulk packaging available; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; Outside box and corrugated cushions are 100% sustainably sourced and recyclable
<b>Security management</b>	HP Sure Click; HP Secure Erase; HP Manageability Integration Kit; HP Sure Sense; HP BIOSphere Gen6; HP Sure Start Gen6; HP Sure Admin; HP Sure View Reflect; MS Bitlocker Encryption; Nano Security Lock Slot; HP Image Assistant Gen4.6; HP Proactive Security (DaaS); HP TPM Configuration Utility; HP Sure Run Gen4; HP Client Security Manager Gen7; HP Sure Recover Gen4 with Embedded Reimaging; Secured-core PC capable; TPM 2.0 Embedded Security Chip; Infineon SLB9670; Camera privacy shutter <sup>[18,24,25,29,31,32,33,34,38,40,42,43,44,45]</sup>
<b>Software included</b>	Bing search for IE11; Buy Office; CyberLink Power Media Player; HP Hotkey Support; HP Noise Cancellation Software; HP Performance Advisor; HP Recovery Manager; HP Support Assistant; Native Miracast support; HP Connection Optimizer; HP ZCentral Remote Boost Software; myHP; HP PC Hardware Diagnostics UEFI; HP PC Hardware Diagnostics Windows; HP Privacy Settings; HP Programmable Key; HP QuickDrop; HP Touchpoint Customizer; HP WorkWell; Tile™ App (optional) <sup>[18,19,21,22,23,26,39,55]</sup>
<b>UPC number</b>	196786396830
<b>Manufacturer Warranty</b>	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.

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## **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. Intel's numbering, branding and/or naming is not a measurement of higher performance. Optional, configurable feature that must be configured at purchase.

[3] 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.

[4] Lowest weight. Weight will vary by configuration.

[5] Battery life will vary depending on the product model, configuration, loaded applications, features, use, wireless functionality and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. See MobileMark18 battery benchmark <https://bapco.com/products/mobilemark-2018/> for additional details

[6] Optional feature that must be configured at purchase.

[7] 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.

[8] 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.

## 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>.

[11] UHD content required to view UHD images.

[18] HP Support Assistant - Requires Windows and Internet Access.

[19] 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).

[20] Manage and monitor your battery's performance and condition and customize charging options with the easy-to-use HP Power Manager dashboard.

[21] Tile™ requires Windows 10. Some features require optional subscription to Tile Premium. Ring feature not available on HP Elite G8 Laptops. Tile application for Windows 10 available for download from the Windows Store. Mobile phone app available for download from App Store and Google Play. Requires iOS 11 and greater or Android 6.0 and greater see <https://support.thetileapp.com/hc/en-us/articles/200424778> for more information. HP Tile will function as long as the PC has battery power.

[22] Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming media players that also support Miracast. You can use Miracast to share what you're doing on your PC and present a slide show. For more information: <http://windows.microsoft.com/en-us/windows-8/project-wireless-screen-miracast>.

[23] HP Performance Advisor Software. Learn more or download at: <https://www8.hp.com/us/en/workstations/performance-advisor.html>

[24] HP BIOSphere Gen6 features may vary depending on the platform and configuration.

[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 Connection Optimizer requires Windows 10.

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

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

[32] Secured-core PC requires an Intel® vPro® or AMD Ryzen™ Pro processor. Requires 8 GB or more system memory. Secured-core PC functionality can be enabled from the factory.

[33] HP Sure View Reflect integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.

[34] HP Sure Sense is available on select HP PCs with Windows 10 Pro, Windows 10 Enterprise, Windows 11 Pro, or Windows 11 Enterprise OS.

[36] Sold separately or as an optional feature.

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

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

**Learn more at**  
[hp.com](http://hp.com)

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