



# HP ZBook Firefly 14 inch G8 Mobile Workstation PC

ZBook performance, more mobile than ever.

Our smallest and lightest ZBook ever provides true mobility for people who push the typical business PC past its breaking point. In the field or at home, with pro-level performance and a color-accurate DreamColor display, you have everything you need to review work and manage projects from anywhere.



\*Product image may differ from actual product

HP recommends Windows 11 Pro for business

#### Manage it on the move

- Starting at just 2.99 lbs<sup>1</sup> our most mobile ZBook is made to move. With 3X faster Wi-Fi<sup>2</sup>, gigabit-class 5G<sup>3</sup> and better battery life<sup>4</sup>, you're equipped for days offsite. And HP SureView Reflect privacy screen guards private information from prying eyes.<sup>5</sup>

#### Pro-level performance. To go.

- Say goodbye to slowdowns and power through projects and heavy workloads with 11th Intel® Core™ processors and NVIDIA® T500 graphics, certified for pro apps. Open large files and run apps simultaneously for speedy multitasking and productivity.

#### Color accuracy to match the highest standards.

- Deeper blacks. Brighter whites. Full spectrum color precision. With a billion on screen colors<sup>6</sup>, 100% DCI-P3 coverage and HDR capability, our groundbreaking DreamColor technology gives you complete confidence in your color with long-lasting battery life.
- Work anywhere without compromising on performance or security with Windows 10 Pro, powered by HP's collaboration and connectivity technology.<sup>8</sup>
- Open large files and run apps simultaneously for speedy multitasking and productivity with the NVIDIA® T500 graphics with 4GB of video memory.
- Bring your ideas to life quickly and effectively with the latest 11th gen quad-core Intel® Core™ processors with up to 4.7 GHz of acceleration when you need it most.<sup>9</sup>
- Strenuously tested to meet ISV certification and deliver superb performance and support with leading software providers, including Autodesk.<sup>10</sup>
- Have confidence with the HP's most secure mobile workstations. Instantly protect against visual hacking with HP Sure View Reflect, and defend against firmware and malware attacks with HP Sure Start, HP Sure Sense and HP Tamper Lock intrusion detection sensor.<sup>11,12,13,14</sup>
- Built with the environment in mind, this ZBook includes recycled ocean-bound plastics, recycled aluminum, plastic-free packaging, and ultra-efficient power consumption.<sup>15,16</sup>
- The keyboard has been re-imagined with rubber domes, an ambient light-sensing backlight and a quiet clickpad for a more comfortable, intuitive, and quiet experience.
- Designed for ultimate durability, this ZBook undergoes 19 brutal MIL-STD 810H tests to help ensure this PC keeps rolling through your workday.<sup>17</sup>
- Plug in to greater connectivity at your desktop with the HP Thunderbolt Dock Gen 2 (120W) for lightning-fast Thunderbolt™ 4 transfers and the flexibility to run up to two external 4K displays.<sup>18,19</sup>
- 170 degree clamshell hinges lay almost flat, for easy collaboration and comfortable viewing at every angle.
- A completely revamped standby system means you're ready to work the moment inspiration strikes. With no sleep mode and no off mode, the modern standby keeps your rig connected and on demand whenever you need it.

## HP ZBook Firefly 14 inch G8 Mobile Workstation PC Specifications Table



\*Product image may differ from actual product

Available Operating Systems	Windows 11 Pro <sup>1</sup> Windows 11 Home – HP recommends Windows 11 Pro for business <sup>1</sup> Windows 11 Home Single Language – HP recommends Windows 11 Pro for business <sup>1</sup> Windows 11 Pro (Windows 11 Enterprise available with a Volume Licensing Agreement) <sup>1</sup> Windows 10 Pro <sup>1</sup> Windows 10 Home – HP recommends Windows 11 Pro for business <sup>1</sup> Windows 10 Home Single Language – HP recommends Windows 11 Pro for business <sup>1</sup> Windows 10 Pro (Windows 10 Enterprise available with a Volume Licensing Agreement) <sup>1</sup> FreeDOS 3.0 (Device comes with Windows 10 and a free Windows 11 upgrade or may be preloaded with Windows 11. Upgrade timing may vary by device. Features and app availability may vary by region. Certain features require specific hardware (see Windows 11 Specifications).)
Processor family <sup>2,3,4,5</sup>	11th Generation Intel® Core™ i7 processor; 11th Generation Intel® Core™ i5 processor
Available Processors <sup>2,3,4,5</sup>	Intel® Core™ i5-1135G7 (2.4 GHz base frequency, up to 4.2 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores); Intel® Core™ i5-1145G7 (2.6 GHz base frequency, up to 4.4 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores); Intel® Core™ i7-1185G7 (3.0 GHz base frequency, up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 4 cores); Intel® Core™ i7-1165G7 (2.8 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 4 cores, 8 threads)
Chipset	Intel® Integrated SoC
Maximum memory	32GB DDR4-2666 non-ECC SDRAM (discrete graphics configurations); 64 GB DDR4-2666 non-ECC SDRAM (integrated graphics configurations) <sup>8</sup>
Memory slots	2 SODIMM, supports dual channel (integrated graphics configurations), Memory soldered down, supports dual channel (discrete graphics configurations)
Internal storage	256 GB up to 2 TB PCIe® Gen3 x4 NVMe™ M.2 2280 TLC Self Encrypting (SED) Solid State Drive (SSD) <sup>7</sup> 256 GB up to 512 GB PCIe® Gen3 x4 NVMe™ M.2 2280 TLC Solid State Drive (SSD) <sup>7</sup> up to 256 GB PCIe® Gen3 x4 NVMe™ M.2 2280 TLC Value Solid State Drive (SSD) <sup>7</sup> up to 512 GB Intel® PCIe® NVMe™ QLC M.2 SSD with 32 GB Intel® Optane™ memory H10 PCIe® NVMe™ M.2 QLC SSD <sup>7, 50, 51</sup> up to 128 GB PCIe® Gen 3 x 2 NVMe™ M.2 SSD <sup>7</sup>
Display size (diagonal)	14"
Display size (diagonal, metric)	35.6 cm (14")
Display	14" diagonal, FHD (1920 x 1080), IPS, anti-glare, 500 nits, 100% DCI-P3, HP DreamColor; 14" diagonal, FHD (1920 x 1080), touch, IPS, anti-glare, 250 nits, 45% NTSC; 14" diagonal, FHD (1920 x 1080), IPS, anti-glare, 400 nits, 100% sRGB; 14" diagonal, FHD (1920 x 1080), IPS, anti-glare, 250 nits, 45% NTSC; 14" diagonal, FHD (1920 x 1080), IPS, anti-glare, 1000 nits, 72% NTSC, HP Sure View Reflect integrated privacy screen <sup>1, 33, 36, 37</sup> 35.6 cm (14") diagonal, FHD (1920 x 1080), IPS, anti-glare, 400 nits, 100% sRGB; 35.6 cm (14") diagonal, FHD (1920 x 1080), IPS, anti-glare, 250 nits, 45% NTSC; 35.6 cm (14") diagonal, FHD (1920 x 1080), IPS, anti-glare, 1000 nits, 72% NTSC, HP Sure View Reflect integrated privacy screen; 35.6 cm (14") diagonal, FHD (1920 x 1080), IPS, anti-glare, 500 nits, 100% DCI-P3, HP DreamColor; 35.6 cm (14") diagonal, FHD (1920 x 1080), touch, IPS, anti-glare, 250 nits, 45% NTSC <sup>11, 33, 36, 37</sup>
Available Graphics	Integrated: Intel® Iris® Xe Graphics <sup>11, 27, 28, 32</sup> Discrete: NVIDIA® T500 (4 GB GDDR6 dedicated) <sup>12, 32</sup> (Intel® Iris® Xe Graphics capabilities require system to be configured with Intel® Core™ i5 or i7 processors and dual channel memory. Intel® Iris® Xe Graphics with Intel® Core™ i5 or 7 processors and single channel memory will only function as UHD graphics.)
Audio	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
Memory card device	1 smart card reader (select models)
Ports and Connectors	Left side: 1 headphone/microphone combo; 1 SuperSpeed USB Type-A 5Gbps signaling rate; 1 SuperSpeed USB Type-A 5Gbps signaling rate (charging) ; Right side: 1 power connector; 1 HDMI 1.4b; 2 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge)
Input devices	HP Premium Quiet Keyboard – spill-resistant, full-size keyboard with drain and DuraKeys; HP Premium Quiet Keyboard – spill-resistant, full-size, backlit keyboard with drain and DuraKeys; Dual pointstick; Clickpad with multi-touch gesture support, taps enabled as default; Microsoft Precision Touchpad with gesture support;
Communications	WLAN: Intel® Wi-Fi CERTIFIED 6™ AX201 (2x2) and Bluetooth® 5.2 combo, non-vPro®; WWAN: Intel® XMM™ 7360 LTE Advanced CAT 9; Qualcomm® Snapdragon™ X55 5G Modem-RF System <sup>10, 47</sup> ;
Camera	720p HD camera; 720p HD IR camera <sup>13, 14</sup>
Software	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 QuickDrop; <sup>18, 19, 20, 22, 23, 26, 55</sup>
Security management	HP Sure Click; HP Secure Erase; HP Manageability Integration Kit; HP Sure Sense; HP Sure Recover Gen3; HP BIOSphere Gen6; HP Sure Start Gen6; HP Sure Admin; HP Sure View Reflect; HP Tamper Lock; MS BitLocker Encryption; HP Proactive Security; HP Image Assistant Gen4.6; 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; <sup>24, 25, 31, 32, 34, 38, 40, 42, 43, 44, 45</sup>
Fingerprint reader	Fingerprint reader (select models)
Power	HP Smart 65 W External AC Power Adapter; HP Smart 45 W External AC Power Adapter
Battery type	HP Long Life 3-cell, 53 Wh Li-ion polymer <sup>30</sup>
Battery life	Up to 14 hours <sup>15</sup>
Battery recharge time	Supports battery fast charge: approximately 50% in 30 minutes
Dimensions	12.73 x 8.45 x 0.71 in 32.3 x 21.46 x 1.79 cm
Weight	Starting at 2.98 lb Starting at 1.35 kg (Weight varies by configuration and components.)
Ecolabels	ENERGY STAR® certified and EPEAT® Gold registered configurations available <sup>16, 52</sup>
Sustainable impact specifications	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 <sup>17, 51, 52, 53, 54</sup>

# HP ZBook Firefly 14 inch G8 Mobile Workstation PC

## Messaging Footnotes

<sup>1</sup> Weight will vary by configuration.

<sup>2</sup> Based on Wi-Fi 5 80MHz and Wi-Fi 6 160MHz minimum requirements when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 802.11ax (Wi-Fi 6). Only available in countries where 802.11ax is supported. Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 (802.11ax) are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ax devices.

<sup>3</sup> Gigabit class Category 16 4G LTE module is optional and must be configured at the factory. Module designed for up to 1 Gbps download speeds as carriers deploy 5 carrier aggregation and 100MHz channel bandwidth, requires activation and separately purchased service contract. Backwards compatible to HSPA 3G technologies. Check with service provider for coverage and availability in your area. Connection, upload and download speeds will vary due to network, location, environment, network conditions, and other factors. 4G LTE not available on all products, in all regions.

<sup>4</sup> When compared to HP ZBook 14u G6.

<sup>5</sup> HP Sure View Reflect is an optional feature, requires factory configuration and is designed to operate in landscape orientation.

<sup>6</sup> One-billion colors through A-FRC technology Dream Color panel availability is 1H2021

<sup>7</sup> When compared to standard FHD displays.

<sup>8</sup> 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 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com>.

<sup>9</sup> 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. Intel® Turbo Boost technology requires a PC with a processor with Intel Turbo Boost capability. Intel Turbo Boost performance varies depending on hardware, software and overall system configuration. See [www.intel.com/technology/turboboost](http://www.intel.com/technology/turboboost) for more information. \*

<sup>10</sup> Autodesk software sold separately.

<sup>11</sup> Based on HP's unique and comprehensive security capabilities at no additional cost among vendors on HP Workstations with Windows and 8th Gen and higher Intel® processors or AMD Ryzen™ 4000 processors and higher.

<sup>12</sup> HP Sure View Reflect integrated privacy screen is an optional feature that must be configured at purchase.

<sup>13</sup> HP Sure Start Gen7 is available on select HP PCs with Intel processors. See product specifications for availability.

<sup>14</sup> HP Sure Sense requires Windows 10. See product specifications for availability.

<sup>15</sup> Speaker enclosure component made with 5% ocean bound plastic as of 2/3/2020.

<sup>16</sup> Uses 75% recycled Aluminum 6063 (architectural aluminum) – A Cover (lid), uses 50% recycled Aluminum 5052 (appliance aluminum) – C & D Cover (keyboard deck & Bottom).

<sup>17</sup> 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.

<sup>18</sup> HP Thunderbolt Dock with Thunderbolt™ 3 sold separately.

<sup>19</sup> External displays sold separately. Optional hybrid graphics is required to run up to two external 4K displays.

## Technical Specifications Footnotes

<sup>1</sup> 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>.

<sup>2</sup> 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.

<sup>3</sup> Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.

<sup>4</sup> Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See [www.intel.com/technology/turboboost](http://www.intel.com/technology/turboboost) for more information.

<sup>5</sup> In accordance with Microsoft's support policy, HP does not support the Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any Windows 8 or Windows 7 drivers on <http://www.support.hp.com>.

<sup>6</sup> For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB of disk is reserved for system recovery software.

<sup>7</sup> The term "10/100/1000" or "Gigabit" Ethernet indicates compatibility with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

<sup>8</sup> Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 (802.11ax) are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ax devices. Only available in countries where 802.11ax is supported.

<sup>9</sup> WWAN is an optional feature and requires factory configuration and separately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location, environment, network conditions, and other factors. 4G LTE not available on all products, and in all regions.

<sup>10</sup> HP DreamColor Panel available in the Q2 2021 timeframe.

<sup>11</sup> Both UMA & Discrete configurations support 3 independent displays when on the HP UltraSlim Dock (sold separately) - Max. resolution = 2.5K @60Hz (DP1) & 2.5K @60Hz (DP2) & FHD (VGA), and support 3 independent displays when on the HP Thunderbolt Dock G2 (sold separately) - Max. resolution = 2.5K @60Hz (DP1) & 2.5K @60Hz (DP2) & FHD (VGA) OR 4K @60Hz (one DP Port) & 4K @60Hz (Type-C output port using a Type C-to-DP adapter).

<sup>12</sup> HD content required to view HD images.

<sup>13</sup> Windows Hello face authentication utilizes a camera specially configured for near infrared (IR) imaging to authenticate and unlock Windows devices as well as unlock your Microsoft Passport.

<sup>14</sup> 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 MobileMark 14 battery benchmark <https://bapcco.com/products/mobilemark-2014/> for additional details

<sup>15</sup> EPEAT® registered where applicable. EPEAT registration varies by country. See [www.epeat.net](http://www.epeat.net) for registration status by country. Search keyword generator on HP's 3rd party option store for solar generator accessories at [www.hp.com/go/options](http://www.hp.com/go/options).

<sup>16</sup> External power supplies, WWAN modules, power cords, cables and peripherals excluded. Service parts obtained after purchase may not be Low Halogen.

<sup>17</sup> HP Support Assistant - Requires Windows and Internet Access.

<sup>18</sup> HP ZCentral Remote Boost does not come pre-installed 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 <http://www.hp.com/ZCentralRemoteBoost>.

<sup>19</sup> Web-only Support

<sup>20</sup> 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>.

<sup>21</sup> HP Performance Advisor Software. Learn more or download at: <https://www8.hp.com/us/en/workstations/performance-advisor.html>

<sup>22</sup> 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.

<sup>23</sup> HP Sure Admin requires 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.

<sup>24</sup> HP Connection Optimizer requires Windows 10.

<sup>25</sup> Support HD decode, DX12, HDMI 1.4, HDCP 2.2 via DP up to 4K @ 60Hz and via HDMI up to 4K @ 30Hz

<sup>26</sup> Shared video memory (UMA) uses part of the total system memory for video performance. System memory dedicated to video performance is not available for other use by other programs.

<sup>27</sup> Supports HP Fast Charge Technology

<sup>28</sup> HP Sure Run Gen4 is available on select HP PCs and requires Windows 10.

<sup>29</sup> 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.

<sup>30</sup> 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.

<sup>31</sup> HP Sure Sense requires 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.

<sup>32</sup> Sold separately or as an optional feature.

<sup>33</sup> Resolutions are dependent upon monitor capability, and resolution and color depth settings.

<sup>34</sup> HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.

<sup>35</sup> 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™.

<sup>36</sup> 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.

<sup>37</sup> HP Tamper Lock is an optional feature that must be configured at the factory and requires a supervisor password be established prior to use.

<sup>38</sup> HP Client Security Manager Gen7 requires Windows and is available on the select HP Elite and Pro PCs.

<sup>39</sup> HP Sure Start Gen6 is available on select HP PCs and requires Windows 10.

<sup>40</sup> Gigabit class Category 16 4G LTE module is optional and must be configured at the factory. Module designed for up to 1 Gbps download speeds as carriers deploy 5 carrier aggregation and 100MHz channel bandwidth, requires activation and separately purchased service contract. Backwards compatible to HSPA 3G technologies. Check with service provider for coverage and availability in your area. Connection, upload and download speeds will vary due to network, location, environment, network conditions, and other factors. 4G LTE not available on all products, in all regions.

<sup>41</sup> Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system. Requires 8th Gen or higher Intel® Core™ processor, BIOS version with Intel® Optane™ supported, Windows 10 64-bit, and an Intel® Rapid Storage Technology (Intel® RST) driver.

<sup>42</sup> Percentage of ocean-bound plastic contained in each component varies by product.

<sup>43</sup> Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 standard.

<sup>44</sup> Fiber cushions made from 100% recycled wood fiber and organic materials.

<sup>45</sup> 100% outer box packaging and corrugated cushions made from sustainably sourced certified and recycled fibers.

<sup>46</sup> HP Quick Drop requires Internet access and Windows 10 PC preinstalled with HP QuickDrop app and either an Android device (phone or tablet) running Android 7 or higher with the Android HP QuickDrop app, and/or an iOS device (phone or tablet) running iOS 12 or higher with the iOS HP QuickDrop app.

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