



# HP ZBook Firefly 16 inch G9 Mobile Workstation PC

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 pro-grade graphics and processor, AI-enhancing webcam and audio, and a color-accurate display—everything you need to collaborate and manage projects anywhere.



\*Product image may differ from actual product

HP recommends Windows 11 Pro for business

#### Upgrade to pro-level performance

- Say goodbye to lags and crashes with faster responsiveness on projects. With up to Intel® Core™ i7 processors,<sup>1</sup> NVIDIA® T550 Laptop GPU<sup>2</sup> and up to 64GB of memory,<sup>3</sup> 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> the 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 wherever you go with ZBook Firefly. The AI enhanced auto-framing 5MP camera,<sup>6</sup> discrete audio amps to block background noises and next-gen Wi-Fi 6E<sup>7,8</sup> or 5G<sup>9</sup> options let you connect from any location with a more personal experience.

#### Immerse in your work

- The more you can see, the more you can do. The 16:10 aspect ratio shows more vertical content so you can see more of your programs. Comfortably work longer with the FHD low blue light display<sup>2</sup> that has no impact on color accuracy.
- Work anywhere without compromising on performance or security with Windows 11<sup>10</sup> powered by HP's collaboration and connectivity technology.
- Move around a little without losing viewers' attention during video calls with HP Auto Frame.<sup>11</sup> The camera and audio follow you or multiple presenters as they move within the camera's frame.
- Collaborate with confidence with advanced features like DNN Noise Suppression to suppress background noise for crisp, clear calls.
- Blitz through multiple tasks and ditch external drives with up to 2 TB local NVMe storage<sup>12,13</sup>
- Power through projects with up to 64 GB RAM<sup>14</sup> for fast editing and design.
- Power through projects with up to NVIDIA® T550 Laptop GPU,<sup>2</sup> certified for pro-apps.
- Bring your ideas to life quickly and effectively with a 12th gen Intel® Core™ processor.
- Get a fast and reliable connection in dense wireless environments with Wi-Fi 6E.<sup>8</sup>
- Connect almost anywhere with the ZBook Firefly with optional support for up to 5G wireless broadband technology with 4x4 antennas that can deliver fast download and upload speeds.<sup>9</sup>
- The more you can see, the more you can do. The 16:10 aspect ratio reduces the need to scroll by showing more vertical content than a 16:9 display. Now you can see more of your programs and apps you use every day.
- Eliminate the need to send yourself emails to move information between your devices. With the HP QuickDrop app, you can wirelessly transfer documents, photos, videos, and more between devices.<sup>16</sup>
- Help protect our shared future with PCs that drive towards increasing sustainability.

## HP ZBook Firefly 16 inch G9 Mobile Workstation PC Specifications Table



\*Product image may differ from actual product

Available Operating Systems	Windows 11 Pro <sup>1</sup> Windows 11 Pro Education <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 (available through downgrade rights from Windows 11 Pro) <sup>1,2</sup> FreeDOS <sup>4,9</sup>
Processor family <sup>3,4,5,6</sup>	12th Generation Intel® Core™ i7 processor; 12th Generation Intel® Core™ i5 processor
Available Processors <sup>3,4,5,6</sup>	Intel® Core™ i7-1260P (1.5 GHz E-core base frequency, 2.1 GHz P-core base frequency, up to 3.4 GHz E-core Max Turbo frequency, up to 4.7 GHz P-core Max Turbo frequency, 18 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads); Intel® Core™ i5-1250P (1.2 GHz E-core base frequency, 1.7 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, 12 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads); Intel® Core™ i5-1240P (1.3 GHz E-core base frequency, 1.2 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, 12 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads); Intel® Core™ i7-1255U (1.2 GHz E-core base frequency, 1.7 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, 12 MB L3 cache, 2 P-cores and 8 E-cores, 12 threads); Intel® Core™ i5-1235U (0.9 GHz E-core base frequency, 1.3 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, 12 MB L3 cache, 2 P-cores and 8 E-cores, 12 threads); Intel® Core™ i7-1265U (1.3 GHz E-core base frequency, 1.8 GHz P-core base frequency, up to 3.6 GHz E-core Max Turbo frequency, up to 4.8 GHz P-core Max Turbo frequency, 12 MB L3 cache, 2 P-cores and 8 E-cores, 12 threads), supports Intel® vPro® Technology; Intel® Core™ i5-1245U (1.2 GHz E-core base frequency, 1.2 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, 12 MB L3 cache, 2 P-cores and 8 E-cores, 12 threads), supports Intel® vPro® Technology; Intel® Core™ i7-1280P (1.3 GHz E-core base frequency, 1.8 GHz P-core base frequency, up to 3.6 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™ i7-1270P (1.6 GHz E-core base frequency, 2.2 GHz P-core base frequency, up to 3.5 GHz E-core Max Turbo frequency, up to 4.8 GHz P-core Max Turbo frequency, 18 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads), supports Intel® vPro® Technology
Chipset	Intel® Integrated SoC
Maximum memory	64 GB DDR5-4800 non-ECC SDRAM <sup>8,35</sup>
Memory slots	2 SODIMM; supports dual channel
Internal storage	256 GB up to 2 TB PCIe® Gen4 x4 NVMe™ M.2 2280 TLC SSD <sup>7</sup> 256 GB up to 512 GB PCIe® Gen4 x4 NVMe™ M.2 2280 TLC SED OPAL 2 SSD <sup>7</sup>
Display size (diagonal, metric)	40.6 cm (16")
Display	40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 250 nits, 45% NTSC; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), touch, IPS, anti-glare, 250 nits, 45% NTSC; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 400 nits, 100% sRGB; 40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 1000 nits, 100% sRGB, HP Sure View Reflect integrated privacy screen <sup>11,33,36,37</sup>
Available Graphics	Integrated: Intel® Iris® Xe Graphics <sup>27,28,32</sup> Discrete: NVIDIA® T550 Laptop GPU (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 i7 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 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) ; Right side: 1 headphone/microphone combo; 1 SuperSpeed USB Type-A 5Gbps signaling rate
Input devices	HP Premium Quiet Keyboard – spill-resistant, full-size, with numeric keypad and DuraKeys; HP Premium Quiet Keyboard – spill-resistant, full-size, optional backlit keyboard with numeric keypad and DuraKeys; Clickpad with multi-touch gesture support, taps enabled as default; Microsoft Precision Touchpad with gesture support;
Communications	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® <sup>5</sup> ; WWAN: Intel® XMM™ 7560 LTE Advanced Pro Cat 16; Intel® 5G Solution 5000 <sup>10,47</sup> ; Optional Near Field Communication (NFC) module
Camera	SMP 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 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>
Security management	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; HP Tamper Lock (select models) <sup>18,24,25,29,31,32,33,34,38,40,42,43,44,45</sup>
Fingerprint reader	Fingerprint reader (select models)
Management features	HP Power Manager <sup>20</sup>
Power	HP Smart 110 W External AC USB Type-C® power adapter; HP Smart 65 W External AC USB Type-C® power adapter
Battery type	HP Long Life 3-cell, 51 Wh Li-ion polymer; HP Long Life 6-cell, 76 Wh Li-ion polymer <sup>30</sup>
Battery life	Up to 13 hours (integrated graphic configuration); Up to 11.5 hours (discrete graphics configuration) <sup>15</sup>
Battery recharge time	Supports battery fast charge: approximately 50% in 30 minutes
Dimensions	35.87 x 25.09 x 1.99 cm
Weight	Starting at 1.8 kg; (Weight varies by configuration and components.)
Ecolabels	EPEAT® registered configurations available <sup>16</sup>
Energy star certified (series fixed)	ENERGY STAR® certified
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>
Warranty	3 year (3-3-0) limited warranty and service offering includes 3 years of parts and labor. Terms and conditions vary by country. Certain restrictions and exclusions apply.

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### Accessories and services (not included)

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**HP 935 Creator Wireless Mouse**



Experience seamless and uninterrupted creativity with a mouse that is crafted to create. Be at your creative best with programmable buttons, ergonomic design, and battery life that lasts up to 12 weeks<sup>1</sup>. Enhance your creative process by pairing with up to 3 devices and enjoy the freedom to work on any surface with track-on-glass sensor.  
**Product number: 1D0K8AA**

**HP Prelude Pro 15.6-inch Recycled Backpack**



Commute with a stylish and durable backpack thoughtfully designed with the environment in mind and made with recycled fabric<sup>1</sup>. The HP Prelude Pro Recycled Backpack comes with safety features for your peace of mind when you carry your devices from work to home and beyond.  
**Product number: 1X644AA**

**HP Stereo USB Headset G2**



Plug right in and get ready to speak and hear clearly all day. With noise-cancelling, comfortable design, and easy adjustment, your sound comfort will carry you from call to call without interference or frustration.  
**Product number: 428K6AA**

**HP USB-C Travel Hub G2**



Easily expand your laptop's connectivity when working on the go with HP USB-C Travel Hub G2.<sup>1</sup> Add an extra display<sup>2</sup> and your accessories, charge your laptop and phone—all with one USB-C™ cable connection.  
**Product number: 7PJ38AA**

# HP ZBook Firefly 16 inch G9 Mobile Workstation PC

## Messaging Footnotes

- <sup>1</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. Optional, configurable feature that must be configured at purchase.
- <sup>2</sup> Optional, configurable feature that must be configured at purchase.
- <sup>3</sup> Up to 64GB memory is an optional feature that must be configured at purchase.
- <sup>4</sup> Lowest weight. Weight will vary by configuration.
- <sup>5</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 18 battery benchmark <https://bapco.com/products/mobilemark-2018/> for additional details
- <sup>6</sup> Optional feature that must be configured at purchase.
- <sup>7</sup> Wi-Fi 6E is an optional feature that must be configured at purchase.
- <sup>8</sup> Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.
- <sup>9</sup> 5G module is an optional feature that must be configured at purchase. AT&T and T-Mobile networks supported in the U.S. Module designed for 5G networks as carriers deploy Evolved-Universal Terrestrial Radio Access New Radio Dual Connectivity (ENDC) with both 100MHz of 5G NR and LTE channel bandwidth, using 256QAM 4x4 as defined by 3GPP, requires activation and separately purchased service contract. 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. 5G not available on all products, in all regions. Backwards compatible to 4G LTE and 3G HSPA technologies. 5G module planned to be available in select countries, where carrier supported.
- <sup>10</sup> Requires the myHP application and Windows OS.
- <sup>11</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>12</sup> For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB of system disk is reserved for system recovery software.
- <sup>13</sup> Optional, configurable feature.
- <sup>14</sup> Up to 64GB memory is an optional feature that must be configured at purchase
- <sup>15</sup> Requires Internet access and Windows 10 or higher 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.
- <sup>16</sup> Some Tile™ features require optional subscription to Tile™ Premium. Ring feature not supported. Tile™ application for Windows 10 and 11 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> External link icon for more information. Tile™ will function as long as the PC has battery power.

## 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> This system is preinstalled with Windows 10 Pro software and also comes with a license for Windows 11 Pro software and provision for recovery software. You may only use one version of the Windows software at a time. Switching between versions will require you to uninstall one version and install the other version. You must back up all data (files, photos, etc.) before uninstalling and installing operating systems to avoid loss of your data.
- <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> 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>7</sup> For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB (for Windows) is reserved for system recovery software.
- <sup>8</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>9</sup> Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.
- <sup>10</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>11</sup> UHD content required to view UHD images.
- <sup>12</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>13</sup> HD content required to view HD images.
- <sup>14</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>15</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://bapco.com/products/mobilemark-2014/> for additional details
- <sup>16</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>17</sup> External power supplies, WWAN modules, power cords, cables and peripherals excluded. Service parts obtained after purchase may not be Low Halogen.
- <sup>18</sup> HP Support Assistant - Requires Windows and Internet Access.
- <sup>19</sup> 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).
- <sup>20</sup> Manage and monitor your battery's performance and condition and customize charging options with the easy-to-use HP Power Manager dashboard.
- <sup>21</sup> 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.
- <sup>22</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>23</sup> HP Performance Advisor Software. Learn more or download at: <https://www8.hp.com/us/en/workstations/performance-advisor.html>
- <sup>24</sup> HP BIOSphere Gen6 features may vary depending on the platform and configuration.
- <sup>25</sup> 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.
- <sup>26</sup> HP Connection Optimizer requires Windows 10.
- <sup>27</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>28</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>29</sup> HP Sure Click requires Windows 10 Pro or higher or Enterprise. See <https://bit.ly/2PrLT6A> for complete details.
- <sup>30</sup> Supports HP Fast Charge Technology
- <sup>31</sup> HP Sure Run Gen4 is available on select HP PCs and requires Windows 10 and higher.
- <sup>32</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>33</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>34</sup> HP Sure Sense is available on select HP PCs with Windows 10 Pro, Windows 10 Enterprise, Windows 11 Pro, or Windows 11 Enterprise OS.
- <sup>35</sup> For systems configured with more than 3 GB of memory and a 32-bit operating system, all memory may not be available due to system resource requirements. Addressing memory above 4 GB requires a 64-bit operating system. Memory modules support data transfer rates up to 4800 MT/s; actual data rate is determined by the system's configured processor. See processor specifications for supported memory data rate.
- <sup>36</sup> Sold separately or as an optional feature.
- <sup>37</sup> Resolutions are dependent upon monitor capability, and resolution and color depth settings.
- <sup>38</sup> HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.
- <sup>39</sup> myHP requires Windows OS.
- <sup>40</sup> HP Secure Erase 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>42</sup> HP Sure Recover Gen4 with Embedded Reimaging is an optional feature which requires Windows 10 and higher 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>43</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>44</sup> HP Client Security Manager Gen7 requires Windows and is available on the select HP Elite and Pro PCs.
- <sup>45</sup> HP Sure Start Gen6 is available on select HP PCs and requires Windows 10 and higher.
- <sup>47</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>49</sup> Web-only Support
- <sup>51</sup> Percentage of ocean-bound plastic contained in each component varies by product.
- <sup>52</sup> Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 standard.
- <sup>53</sup> Fiber cushions made from 100% recycled wood fiber and organic materials.
- <sup>54</sup> 100% outer box packaging and corrugated cushions made from sustainably sourced certified and recycled fibers.
- <sup>55</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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