

# HP ZBook 15 G5 Mobile Workstation



Get extraordinary performance with industry-leading security packed into a mobile workstation designed to thrive with heavy rendering, engineering and simulation workflows.

HP recommends Windows 10 Pro.



## Mobile powerhouse

Get unthrottled performance even with the heaviest multi-application workloads. The HP ZBook 15 has 30% better thermal performance gen over gen to ensure it's quiet and cool with the CPU and GPU running at max performance for long periods of time.

## Remarkable expandability, no tools required

The HP ZBook 15 can be customized to meet the demands of every engineer and designer. And when your technology needs to evolve, you can upgrade storage or memory in seconds without tools.

## HP's most secure mobile workstation

Protect confidential files with security features like facial recognition and a webcam shutter<sup>1</sup>. The HP Sure View privacy display<sup>2</sup> helps protect against visual hacking at the touch of a button so work can be done privately in busy, open areas.

## Featuring

- Be productive in any situation. Windows 10 Pro and powerful security, collaboration, and connectivity features from HP help you power through your day on the HP ZBook 15.<sup>3</sup>
- Render photorealistic images and designs quickly with certified NVIDIA® Quadro® P2000 graphics - optimized for stability and peak performance with professional software apps.
- Do more at once with next-generation 6-core Intel® Xeon® processors designed to handle complex, multi-threaded applications like Autodesk 3ds Max and Revit®.
- Work with confidence knowing your laptop is certified with leading software applications like Revit, SolidWorks and AutoCAD to ensure peak performance even with complex projects.
- Bring your projects to life with one billion colors on the stunning 600 nit, 4K HP DreamColor display. Maintain color accuracy with a built color calibration system.<sup>4</sup>
- Increase productivity with up to 6 TB storage and 3 drives. Get 4 TB local PCIe NVMe storage - up to 21x faster than standard HDD and 6x faster than SATA SSD.<sup>5</sup>
- Get remarkable, real time performance running multiple applications simultaneously with 64 GB RAM.
- Confidently take your work anywhere knowing your HP ZBook 15 was built for 24x7x365 workloads and designed to pass rigorous military standard tests.<sup>6</sup>
- Accelerate through your workflow with more connections and fast file upload and transfer speeds.
- Host virtual meetings efficiently with the HP Collaboration Keyboard, WWAN LTE and a world-facing 3rd mic. Experience premium audio with custom tuned Bang & Olufsen speakers.<sup>7</sup>
- Unclutter your work environment with HP's most powerful docking solution. Experience lightning fast Thunderbolt™ connectivity with remarkable performance.<sup>8</sup>
- Be ready for anything with a minor spill-resistant full-sized chiclet keyboard, numeric keypad and trackpad with a chemically strengthened glass cover to help prevent wear & tear.

# HP ZBook 15 G5 Mobile Workstation Specifications Table



Operating System	Windows 10 Pro 64 – HP recommends Windows 10 Pro. <sup>1</sup> Windows 10 Home 64 <sup>1</sup> Windows 10 Pro for Workstations 64 <sup>1</sup> FreeDOS 2.0 Red Hat® Enterprise Linux® 7 <sup>3,33</sup> Ubuntu 16.04.3 LTS <sup>33</sup>
Processor Family	8th Generation Intel® Core™ i7 processor (i7-8750H, i7-8850H); 8th Generation Intel® Core™ i5 processor (i5-8300H, i5-8400H); 8th Generation Intel® Core™ i7+ processor (Core™ i7 and Intel® Optane™ memory); 8th Generation Intel® Core™ i5+ processor (Core™ i5 and Intel® Optane™ memory) <sup>2,3</sup>
Processors <sup>2,3,4,31,32</sup>	Intel® Core™ i7-8750H with Intel® UHD Graphics 630 (2.2 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i7+ 8750H (Core™ i7 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (2.2 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i5+ 8300H (Core™ i5 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (2.3 GHz base frequency, up to 4.0 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Core™ i5+ 8400H vPro™ (Core™ i5 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (2.5 GHz base frequency, up to 4.2 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Core™ i7+ 8850H vPro™ (Core™ i7 and 16 GB Intel® Optane™ memory) with Intel® UHD Graphics 630 (2.6 GHz base frequency, up to 4.3 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i7 8850H vPro™ with Intel® UHD Graphics 630 (2.6 GHz base frequency, up to 4.3 GHz with Intel® Turbo Boost Technology, 9 MB cache, 6 cores) Intel® Core™ i5 8400H vPro™ with Intel® UHD Graphics 630 (2.5 GHz base frequency, up to 4.2 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) Intel® Xeon® E 2176M vPro™ with Intel® UHD Graphics P630 (2.7 GHz base frequency, up to 4.4 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores) Intel® Xeon® E 2186M vPro™ with Intel® UHD Graphics P630 (2.9 GHz base frequency, up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB cache, 6 cores) Intel® Core™ i5-8300H with Intel® UHD Graphics 630 (2.3 GHz base frequency, up to 4.0 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores)
Maximum Memory	64 GB DDR4-2667 ECC SDRAM; 64 GB DDR4-2667 non-ECC SDRAM <sup>5</sup> (Transfer rates up to 2667 MT/s.)
Memory Slots	4 SODIMM
Internal Storage	2 TB 5400 rpm SATA <sup>6</sup> 500 GB up to 1 TB 7200 rpm SATA <sup>6</sup> 500 GB 7200 rpm SATA SED <sup>6</sup> 500 GB 7200 rpm SATA FIPS 140-2 SED <sup>6</sup> 500 GB up to 2 TB 5400 rpm SATA SSHD <sup>6</sup> 256 GB up to 1 TB SATA SSD <sup>6</sup> 256 GB M.2 SATA SED SSD <sup>6</sup> 512 GB M.2 SATA FIPS 140-2 SED SSD <sup>6</sup> 256 GB up to 2 TB PCIe® NVMe™ M.2 SSD <sup>6</sup> 256 GB up to 512 GB PCIe® NVMe™ M.2 SED SSD <sup>6</sup>
Display <sup>9,33</sup>	HP Sure View Integrated Privacy Screen 15.6" diagonal FHD eDP LED-backlit touch screen with Corning® Gorilla® Glass 4, 650 cd/m <sup>2</sup> (1920 x 1080) HP DreamColor 15.6" diagonal 4K IPS anti-glare LED-backlit, 600 cd/m <sup>2</sup> , 100% AdobeRGB (3840 x 2160) 15.6" diagonal FHD IPS eDP anti-glare LED-backlit, 220 cd/m <sup>2</sup> (1920 x 1080) 15.6" diagonal FHD IPS eDP anti-glare LED-backlit with ambient light sensor, 400 cd/m <sup>2</sup> (1920 x 1080) 15.6" diagonal 4K IPS eDP LED-backlit touch screen with Corning® Gorilla® Glass 4 and ambient light sensor, 400 cd/m <sup>2</sup> (3840 x 2160) 15.6" diagonal 4K IPS eDP anti-glare LED-backlit and ambient light sensor, 400 cd/m <sup>2</sup> (3840 x 2160)
Available Graphics	Integrated: Intel® UHD Graphics 630; Intel® UHD Graphics P630 <sup>9,10</sup> Discrete: AMD Radeon™ Pro WX 4150 Graphics (4 GB GDDR5 dedicated); NVIDIA® Quadro® P1000 (4 GB GDDR5 dedicated); NVIDIA® Quadro® P2000 (4 GB GDDR5 dedicated) <sup>11</sup> (Intel® UHD Graphics 630 integrated on Core™ i7 and Core™ i5 processors. Intel® UHD Graphics P630 integrated on Xeon™ processors.)
Expansion Slots	1 UHS-II SD card reader; 1 smart card reader (SD supports next generation secure digital and is backward compatible to SDHC, SDXC)
Ports and Connectors	Left side: 1 RJ-45; 1 USB 3.0; 1 USB 3.0 (charging) Right side: 1 HDMI 2.0; 1 headphone/microphone combo; 1 power connector; 1 USB 3.0; 2 USB 3.1 Type-C™ Thunderbolt™ 3 (DisplayPort™ 1.3)
Networking	LAN: Integrated Intel® I219-LM GbE WLAN: Intel® Dual Band Wireless-AC 9560 802.11ac (2x2) Wi-Fi® and Bluetooth® 5.0 Combo; Intel® Dual Band Wireless-AC 9560 802.11ac (2x2) Wi-Fi® and Bluetooth® 5.0 Combo, non-vPro™ <sup>7</sup> WWAN: HP lt4132 LTE/HSPA+ 4G Mobile Broadband Module; Intel® XMM™ 7360 LTE Advanced <sup>8,14</sup> (Optional Near Field Communication (NFC) module)
Audio	Bang & Olufsen, custom tuning, dual stereo speakers, dual array digital microphone, functions keys for volume up and down, combo microphone/headphone jack, world facing microphone, HD audio, HP Clear Sound Amp <sup>13</sup>
Input Device	HP Collaboration Keyboard, full-size, spill-resistant, backlit, with drain and DuraKeys, clickpad with image sensor and glass surface, multi-touch gestures and taps enabled; Clickpad with Color Calibration Sensor; Image sensor touchpad with on/off button, two-way scroll, gestures, three buttons; Pointstick with three additional pointstick buttons
Camera	HP Privacy HD Camera 720p; HP Privacy HD IR Camera 720p, face authentication with Windows Hello <sup>9,12,14,30</sup>
Power	150 W Slim Smart external AC power adapter HP Long Life 4-cell, 90 Wh Li-ion polymer <sup>26,34</sup>
Security	Absolute persistence module; Common Criteria EAL4+ Augmented Certified Discrete TPM 2.0 Embedded Security Chip; DriveLock and Automatic DriveLock; HP Device Access Manager; HP FingerPrint Sensor; HP Password Manager; HP Power On Authentication; HP Security Manager; Pre-boot authentication; Microsoft Security Defender; HP Sure Click; Measured Boot; HP BIOS Config Utility (BCU); HP Client Catalog; HP Driver Packs; HP System Software Manager (SSM); HP Manageability Integration Kit Gen2; HP BIOSphere with Sure Start Gen4; HP Secure Disk Erase; HP Host Based Mac Address <sup>19,20,21,22,23,26,27,28,29</sup>
Software	Bing search for IE11; Buy Office; HP ePrint Driver + JetAdvantage; HP Hotkey Support; HP Noise Cancellation Software; HP Performance Advisor; HP Recovery Manager; HP Remote Graphics Software; HP Support Assistant; HP Velocity; Skype for Business Certified; HP LAN-WLAN Protection; HP JumpStart; HP Client Security Suite Gen4 <sup>15,16,17,18</sup>
Dimensions (W x D x H)	14.8 x 10.4 x 1 in 37.6 x 26.4 x 2.6 cm
Weight	Starting at 5.79 lb Starting at 2.6 kg (Weight varies by configuration and components.)
Energy Efficiency Compliance	ENERGY STAR® certified and EPEAT® registered configurations available <sup>24</sup>
Environmental	Low halogen <sup>25</sup>
Warranty	3 year or 1 year limited warranty options available, depending on country. Batteries have the same 1 year or 3 year limited warranty as the platform. 24/7 operation will not void the HP warranty. Optional HP Care Pack Services are extended service contracts which go beyond your standard limited warranties.

## Accessories and Services (not included)

HP Thunderbolt Dock 230W G2



Reinvent docking and boost productivity with HP's most versatile Thunderbolt™ dock, the small, sophisticated HP Thunderbolt Dock G2. Designed for workspace flexibility and network manageability<sup>1</sup>, it delivers USB-C™<sup>2</sup> device connectivity and optional integrated audio.<sup>3</sup>  
**Product number: 2UK38AA**

HP Professional Slim Top Load Case



Designed for business pros who want a protective laptop case without the bulk, the HP Professional Slim Top Load Case delivers ample storage in a stylish, slim design.  
**Product number: H4J91AA**

HP Comfort Grip Wireless Mouse



The HP Comfort Grip Wireless Mouse features a 30-month battery life<sup>1</sup> and a bold, modern design that integrates seamlessly with HP Business Notebooks.  
**Product number: H2L63AA**

HP 200W Smart AC Adapter (4.5mm)



Conserve battery life, be more productive, and get uninterrupted power for your HP ZBook and select HP Docking Stations<sup>1</sup> with HP 200W Smart AC Adapter.  
**Product number: W2F75AA**

HP Z32 31.5-inch 4K UHD Display



Experience extraordinary, precise color and see more of your projects at one time on a display with stunning 4K<sup>1</sup> resolution.  
**Product number: 1AA81A8**

HP 3 year Next Business Day Onsite HW Support w/Accidental Damage Protection-G2 for Notebooks



When hardware issues come up, the sooner you can get running again, the better. Have expertise at the ready with HP Hardware Next Business Day<sup>1</sup> Onsite Service with Accidental Damage Protection, and vastly improve your product uptime. With high-quality remote assistance or convenient onsite support available the next business day, help is there when you need it—so you can get back to work.  
**Product number: UC282E (for 1 year platforms), UC279E (for 3 year platforms)**

## Messaging Footnotes

- <sup>1</sup> Facial recognition and webcam shutter are optional features that must be configured at purchase.
  - <sup>2</sup> HP Sure View integrated privacy screen is an optional feature that must be configured at purchase.
  - <sup>3</sup> Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers and/or software 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>4</sup> DreamColor display required for 1 billion colors and is an optional or add on feature.
  - <sup>5</sup> 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.
  - <sup>6</sup> MIL-STD-810G testing is pending. 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>7</sup> WWAN module is optional, must be configured at the factory and requires 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, in all regions.
  - <sup>8</sup> ZBook dock with Thunderbolt™ sold separately.
- Screen images courtesy of Larson & Darby

## 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 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>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> 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>4</sup> vPro. Some functionality of this technology, such as Intel Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel vPro technology is dependent on 3rd party software providers. Compatibility future "virtual appliances" is yet to be determined.
- <sup>5</sup> Only 2 DIMM configurations run at 2400 MHz and 4 DIMM configurations run at 2133 MHz.
- <sup>6</sup> For storage drives GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10) is reserved for system recovery software.
- <sup>7</sup> Wireless cards are optional or add-on features and requires separately purchased wireless access point and internet service. Availability of public wireless access points limited. The specifications for the 802.11ac WLAN are draft specifications 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 802.11ac WLAN devices.
- <sup>8</sup> WWAN is an optional feature. WWAN use requires 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>9</sup> HD content required to view HD images.
- <sup>10</sup> Intel® HD graphics 630 is configurable as a standalone graphics option; Intel® HD graphics P630 only used when NVIDIA® Optimus™ Technology is enabled.
- <sup>11</sup> NVIDIA® Quadro® mobile professional graphics support up to four independent displays when using a HP ZBook Dock with Thunderbolt 3 (sold separately) or DP 1.2 hubs with MST.
- <sup>12</sup> Privacy camera not available on touchscreen.
- <sup>13</sup> Dual-microphone array when equipped with optional webcam and optional world facing microphone.
- <sup>14</sup> Optional or add-on feature
- <sup>15</sup> HP ePrint Driver requires an internet connection to HP web-enabled printer and HP ePrint account registration (for a list of eligible printers, supported documents and image types and other HP ePrint details, see [www.hp.com/go/businessmobileprinting](http://www.hp.com/go/businessmobileprinting)).
- <sup>16</sup> HP Remote Graphics Software requires a Windows, Linux®, or Mac®OS X 10.10 and newer operating system and network access.
- <sup>18</sup> HP Client Security Suite Gen 4 requires Windows and Intel® or AMD 8th generation processors.
- <sup>19</sup> BIOS Absolute Persistence module is shipped turned off, and will be activated when customers purchase and activate a subscription. Service may be limited. Check with Absolute for availability outside the U.S. The optional subscription service of Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: <http://www.absolute.com/company/legal/agreements/computrace-agreement>.
- <sup>20</sup> Finger Sensor is optional
- <sup>21</sup> HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.
- <sup>22</sup> HP Password manager requires Windows.
- <sup>23</sup> HP BIOSphere Gen4 requires Intel® or AMD 8th generation processors. HP Sure Start Gen4 is available on HP Z Workstations products equipped with 8th generation Intel® or AMD processors.
- <sup>24</sup> EPEAT® registered where applicable. EPEAT registration varies by country. See [www.epeat.net](http://www.epeat.net) for registration status by country.
- <sup>25</sup> External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.
- <sup>26</sup> Battery is internal and not replaceable by customer. Serviceable by warranty. Batteries have a default one year limited warranty except for Long Life batteries which will have same 1-year or 3-year.
- <sup>27</sup> HP Secure Disk Erase is for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88.
- <sup>28</sup> HP Sure Click is available on select HP platforms and supports Microsoft® Internet Explorer, Google Chrome, and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode. Check <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW> for all compatible platforms as they become available.
- <sup>29</sup> Microsoft Security Defender requires Windows 10
- <sup>30</sup> Windows Hello optional
- <sup>31</sup> Intel® Optane™ memory system acceleration does not replace or increase the DRAM in your system.
- <sup>32</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>33</sup> Supported not preloaded.
- <sup>34</sup> 4 cell non only w/ UMA, and not possible with DSC

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