# HP ProBook 450 G8 Notebook PC



### Modern design for today's workstyles

With a new compact design, the HP ProBook 450 Laptop PC delivers commercial performance, security, and durability to professionals at growing companies who move from desk to meeting room to home.



HP recommends Windows 10 Pro for business

#### A new design for wherever work takes you

 The compact, light, slim chassis with aluminum components is easy to carry from place to place. An optional high-brightness display<sup>3</sup> provides an over 87-percent screen-to-body ratio and a new keyboard delivers a quiet and responsive experience.

#### Multi-layered security protection

 Your growing business requires the protection of a PC with commercial-grade security features. The HP ProBook 450 is enhanced with security and privacy from the BIOS up.

#### Power that lasts

- Equipped with the latest optional quad-core Intel® processor<sup>2,4</sup> with breakthrough Intel® Iris® Xe graphics<sup>5</sup> and fast, upgradeable dual channel SODIMM memory<sup>6</sup>, the HP ProBook 450 drives performance with long battery life and high-speed solid-state drives.
- A lightweight chassis with aluminum components brings a stylish look.
   Confidence in performance comes from 120,000 hours of the HP Total Test Process and MIL-STD 810H testing.<sup>7,8</sup>
- Help speed up demanding business applications with an optional quad-core Intel® Core™ processor.<sup>2,4</sup>
- Get going fast with Connected Modern Standby and wake your PC from the optional match-on-sensor fingerprint sensor.<sup>3</sup>
- Enjoy the consistent feel and extremely quiet typing experience of the redesigned keyboard with rubber dome keys.
- Firmware attacks can completely devastate your PC. Stay protected with HP Sure Start Gen6, the self-healing BIOS that automatically recovers itself from attacks or corruption.<sup>9</sup>
- Fortify your security with multiple factors of authentication and policies hardened at the silicon level.<sup>10</sup>
- The portability of your PC and the reliability of a fast connection determines where you can work. Get a fast and reliable connection in dense wireless environments with gigabit-speed Wi-Fi 6.<sup>11,12</sup>
- Instantly block prying eyes by making your screen appear dark and unreadable from the side with optional HP Sure View Gen3.<sup>13</sup>
- Get peace-of-mind with a built-in HP Privacy Camera that blocks the lens of your camera.<sup>14</sup>

## HP ProBook 450 G8 Notebook PC Specifications Table







Available Operating Systems	Windows 10 Pro 64 – HP recommends Windows 10 Pro for business <sup>1</sup> Windows 10 Home 64 <sup>1</sup> Windows 10 Home Single Language 64 <sup>1</sup> Windows 10 Pro (Windows 10 Enterprise available with a Volume Licensing Agreement) <sup>1</sup> FreeDOS
Processor family <sup>6</sup>	11th Generation Intel® Core™ i7 processor; 11th Generation Intel® Core™ i5 processor; 11th Generation Intel® Core™ i3 processor
Available Processors <sup>3,4,5,6</sup>	Intel® Core™ i7-1165G7 with Intel® Iris® X® Graphics (2.8 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 4 cores); Intel® Core™ i5-1135G7 with Intel® Iris® X® Graphics (2.4 GHz base frequency, up to 4.2 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores); Intel® Core™ i3-1115G4 with Intel® UHD Graphics (3.0 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 2 cores)
Maximum memory	32 GB DDR4-3200 SDRAM <sup>7</sup> Both slots are accessible/upgradeable by IT or self-maintainers only. Supports dual channel memory.
Memory slots	2 SODIMM
Internal storage	up to 512 GB Intel® PCIe® NVMe™ QLC M.2 SSD with 32 GB Intel® Optane™ memory H10 <sup>8,9,10</sup> 128 GB up to 1 TB PCIe® NVMe™ M.2 SSD TLC <sup>8</sup> 256 GB up to 512 GB PCIe® NVMe™ Value M.2 SSD <sup>8</sup>
Display	39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 1000 nits, 100% sRGB, HP Sure View integrated privacy screen; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 400 nits, low power, 100% sRGB; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 39.6 cm (15.6") diagonal, HD (1366 x 768), narrow bezel, anti-glare, 250 nits, 45% NTSC; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), touch, narrow bezel, anti-glare, 250 nits, 45% NTSC 12,14,15,16
Available Graphics	Integrated: Intel® Iris® X® Graphics; Intel® UHD Graphics <sup>12</sup> Discrete: NVIDIA® GeForce® MX450 (2 GB DDR5 dedicated) <sup>41</sup> (Support HD Decode, DX12, and HDMI 1.4b.)
Audio	Dual stereo speakers, dual array microphone
Wireless technologies	Intel® XMM™ 7360 LTE-Advanced; Intel® AX201 Wi-Fi 6 (2x2) and Bluetooth® 5 combo, non-vPro®; Realtek 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 combo <sup>11,42</sup>
Expansion slots	1 microSD (Supports SD, SDHC, SDXC.)
Ports and Connectors	3 Super Speed USB Type-A 5Gbps signaling rate (1 charging, 1 power); 1 SuperSpeed USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™); 1 RJ-45; 1 headphone/microphone combo; 1 HDMI 1.4b; 1 AC power (HDMI cable sold separately.)
Input devices	HP Premium Keyboard – spill-resistant, full-size, optional backlit keyboard with numeric keypad <sup>13</sup> ; Clickpad with multi-touch gesture support;
Communications	Realtek 10/100/1000 GbE NIC <sup>43</sup> ;
Camera	720p HD camera; IR Camera (select models) <sup>12</sup>
Software	HP Connection Optimizer; HP Image Assistant; HP Hotkey Support; HP Noise Cancellation Software; HP Support Assistant; Buy Office (Sold separately); HP Power Manager; HP WorkWell; myHP; HP Privacy Settings; HSA Fusion for Commercial; HSA Telemetry for Commercial; Touchpoint Customizer for Commercial; HP Notifications <sup>17,18</sup>
Security management	Absolute persistence module; HP DriveLock and Automatic DriveLock; HP Secure Erase; Preboot authentication; TPM 2.0 embedded security chip shipped with Windows 10 (Common Criteria EAL4+ Certified); HP Sure Click; Windows Defender; HP BIOSphere Gen5; HP Sure Sense; BIOS Update via Network; Master Boot Record Security; Support for chassis padlocks and cable lock devices; HP Client Security Manager Gen6; HP Sure Start Gen6; HP Sure Run Gen3; HP Sure Recover Gen3; HP Sure Admin; HP Pro Security Edition 23,24,25,26,27,28,29,30,31,32,33,34,35
Fingerprint reader	Fingerprint sensor (select models)
Management features	HP Driver Packs; HP System Software Manager (SSM); HP BIOS Config Utility (BCU); HP Client Catalog; HP Manageability Integration Kit Gen3 <sup>21,22</sup>
Power	HP Smart 65 W External AC power adapter; HP Smart 45 W External AC power adapter; HP Smart 65 W USB Type-C® adapter <sup>37</sup>
Battery type	HP Long Life 3-cell, 45 Wh polymer
Dimensions	35.94 x 23.39 x 1.99 cm
Weight	Starting at 1.74 kg (Weight will vary by configuration.)
Energy efficiency compliance	ENERGY STAR® certified; EPEAT® Gold registered. EPEAT® registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country. <sup>39</sup>
Environmental specifications	Low halogen; TCO Certified <sup>40</sup>
Warranty	1 year standard parts and labor limited warranty (1-1-0), depending on country (upgrades available). 1 year limited warranty on primary battery.

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#### Accessories and services (not included)

HP 15.6 Business Top Load



When a notebook PC is your companion in and out of the office, you need a case you can trust to keep it safe. The HP 15.6 Business Top Load is ready for action with lockable 1 zippers, a secure RFID pocket, and plenty of room for your device up to 15.6" diagonal and everyday essentials. Offering flexibility and wireless connectivity in the office and on the road. Product number: 2SC66AA

HP 65W USB-C Slim Travel Power Adapter



Use one adapter to power and charge your notebook or mobile device<sup>1</sup> and a USB accessory at the same time, in the office or on the go, with the surprisingly compact HP 65W USB-C Slim Travel Power Adapter. Offering flexibility and wireless connectivity in the office and on the

Product number: 3PN48AA

**HP Sure Key Cable Lock** 



Take the guess work out of securing your notebook, display, dock, and accessories with the removable, interchangeable heads of the HP Sure Key Cable Lock. Offering flexibility and wireless connectivity in the office and on the road.

Product number: 6UW42AA

HP 3 year Next Business Day Onsite Hardware Support for Notebooks



Receive 3 years of next business day onsite HW support from an HP-qualified technician for your computing device, if the issue cannot be solved remotely.

Product number: U9VF3E

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#### Messaging Footnotes

- <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
- Optional feature that must be configured at the factory.
   Quad-core processor sold separately or as an optional feature.
- 5 Intel® Iris® X° graphics requires Intel® Core™ i5 or i7 processor.
  6 Dual channel memory is sold separately or as an optional feature. Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed.
- THP Total Test Process testing is not a guarantee of future performance under these test conditions. Any accidental damage requires an optional HP Accidental Damage Protection Care Service.

  BMIL STD testing is not intended to demonstrate fitness for U.S. Department of Defense 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 Service. 9 HP Sure Start Gen6 is available on select HP PCs.
- 10 HP Multi Factor Authenticate Gen3 is available on select HP PCs and requires Intel® Core™ processor, Intel® integrated graphics, and Intel® WLAN
- 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 PC to communicate with other 802.11ax devices.
- 12 Wi-Fi® supporting gigabit speeds is achievable with Wi-Fi 6 (802.11ax) when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 160MHz channels.

  13 HP Sure View Gen3 integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.
- <sup>14</sup> HP Privacy Camera only available PCs equipped with HD or IR camera and must be installed at the factory.

#### **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>3</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>4</sup> Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.

- 5 Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See www.intel.com/technology/turboboost for more information.
  6 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 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any 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 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any 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 8 or Windows 9 or drivers on http://www.support.hp.com.
- Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed.
- <sup>8</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>9</sup> Intel<sup>®</sup> Optane<sup>™</sup> memory system acceleration does not replace or increase the DRAM in your system. Requires 8th Gen or higher Intel<sup>®</sup> Core™ processor, BIOS version with Intel<sup>®</sup> Optane™ supported, Windows 10 64-bit, and an Intel<sup>®</sup> Rapid Storage Technology (Intel<sup>®</sup> RST) driver.
- 10 Intel® Optane™ memory H10 only for Intel® PCle® NVMe™ QLC M.2 SSD.
  11 Wireless access point and Internet service required and sold separately. 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
- HD content required to view HD images.
   Backlit keyboard is an optional feature.

- 14 Resolutions are dependent upon monitor capability, and resolution and color depth settings.
   15 HP Sure View integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.
- <sup>16</sup> Actual brightness will be lower with touchscreen or Sure View
- 17 HP Connection Optimizer requires Windows 10.
   18 HP Support Assistant requires Windows and Internet access.
- <sup>19</sup> HP Driver Packs not preinstalled, however available for download at http://www.hp.com/go/clientmanagement.
  <sup>20</sup> HP Manageability Integration Kit can be downloaded from http://www.hp.com/go/clientmanagement.

- 22 Hp Manageability Integration Nrt can be downloaded from http://www.hp.com/go/clientmanagement. <sup>23</sup> Absolute firmware module is shipped turned off and can only be activated with the purchase a license subscription and full activation of the software agent. License subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. Certain conditions apply. For full details visit: https://www.absolute.com/about/legal/agreements/absolute/

  <sup>24</sup> HP Drive Lock & Automatic Drive Lock is not supported on NVMe drives.

- 25 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™. 26 Firmware TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).
- <sup>27</sup> HP Sure Click 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>28</sup> Windows Defender Opt In, Windows 10, and internet connection required for updates.
- <sup>29</sup> HP BIOSphere Gen5 is available on select HP Pro and Elite PCs. See product specifications for details. Features may vary depending on the platform and configurations <sup>30</sup> HP Sure Sense requires requires Windows 10 Pro or Enterprise.
- 31 HP Client Security Manager Gen6 requires Windows and is available on the select HP Pro and Elite PCs.
  32 HP Sure Start Gen6 is available on select HP PCs.
- 33 HP Sure Run Gen3 is available on select Windows 10 based HP Pro, Elite and Workstation PCs with select Intel® or AMD processors.
- 34 HP Sure Recover Gen3 is available on select HP PCs and requires an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.

  35 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>37</sup> Availability may vary by country.

  38 HP Care Packs are sold separately. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. For details, visit http://www.hp.com/go/cpc. HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local
- aws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.

  Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit www.epeat.net for more information.
- 40 External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

  41 Integrated graphics depends on processor. NVIDIA® Optimus™ technology requires an Intel processor, plus an NVIDIA® GeForce® discrete graphics configuration and is available on Windows 10 Pro OS. With NVIDIA® Optimus™ technology,
- full enablement of all discrete graphics video and display features may not be supported on all systems (e.g. OpenGL applications will run on the integrated GPU or the APU as the case may be).

  42 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>43</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.

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