

# HP ProBook 450 15.6 inch G9 Notebook PC

## Essential features in a modern design

The HP ProBook 450 Laptop provides growing businesses with the commercial-grade performance, HP Wolf Security for Business<sup>5</sup>, and durability in a compact design. This PC is powered by an Intel® processor<sup>2</sup> and protected with always-on security you can trust.

### Designed for hybrid workstyles

Whether in the same room or miles apart, bring your teams together with tools to keep interactions open and productive. The ultra-narrow bezel maximizes screen size while lightweight aluminum materials provide an easy-to-carry, sleek design.

### Everyday business performance

Equipped with the latest Intel® processor<sup>2</sup>, multiple graphics options<sup>3</sup>, and fast, upgradeable dual channel SODIMM memory<sup>4</sup>, the HP ProBook 450 drives performance with long battery life and high-speed solid-state drives.

### Protected by HP Wolf Security

HP Wolf Security for Business creates a hardware-enforced, always-on, resilient defense. From the BIOS to the browser, above, in, and below the OS, these constantly evolving solutions help protect your PC from modern threats.<sup>5</sup>



\*Product image may differ from actual product



# HP ProBook 450 15.6 inch G9 Notebook PC

## Featuring

### Premium look in durable aluminum

Easily carry your lightweight ProBook with confidence. The durable chassis made with aluminum materials has an appealing design with a small footprint. The narrow bezel allows a larger screen with 87% screen-to-body ratio.

### myHP

Enable hardware and software innovations from HP with the myHP application. This single app houses access to settings for audio, video, programmable key, and more.

### PC protection is your top priority

HP Wolf Pro Security Edition PCs provide enterprise-level security packaged for small and medium sized businesses.<sup>5</sup>

### Look your best, even in low light

Optimized for video calls in low-lighting conditions. The HD camera provides visual clarity, while Temporal Noise Reduction lowers the effects of visual noise and pixelation, allowing increased definition so you can capture all the details.

### Wired connection

Get fast and efficient data transfer and internet access over wired Ethernet networking. Simply connect your ProBook directly to your company's network with an included RJ-45 port—no dongles or docking station needed.

### Latest Intel® multi-core processor

Configure your laptop's CPU for the perfect combination of performance, power consumption, and value. The latest Intel® processor handles multiple work tasks smoothly and reliably with multiple processing cores to divide up the work.<sup>2</sup>

### Choice of batteries

With two battery options, you can choose the right battery size for your business and budget needs. Customize charging options and manage battery performance with the easy-to-use HP Power Manager dashboard.<sup>6,15</sup>

### Durable and field ready

Never fear bumps with the thin and light HP ProBook that endures 120,000 hours of the HP Total Test Process and undergoes MIL-STD 810 tests.<sup>7,8</sup>

### Help protect our shared future

The HP ProBook 450 uses ocean-bound plastics in the speaker enclosure and display bezel. This EPEAT® registered and ENERGY STAR® certified notebook PC also contains 50 percent recycled aluminum in both the top and bottom covers.<sup>9,10</sup>

### Physical tamper protection

Require a supervisor password to be used to unlock a PC anytime optional tamper detection sensors located on the bottom cover of the PC and on internal storage are triggered with HP Tamper Lock.<sup>11</sup>

### Fast and efficient wireless LAN

Work almost anywhere, even in crowded wireless networks, with a fast, reliable wireless connection, supporting up to Wi-Fi 6E. For expanded connectivity and enhanced security, add optional, high-speed CAT16 WWAN with an external SIM card.<sup>12,13</sup>

### Work longer, charge faster

HP Long Life Battery gets you through a day of meetings without plugging in. When the day goes longer, you can quickly recharge your PC with HP Fast Charge. You'll get up to 50% battery life in just 30 minutes of charging.<sup>14</sup>



# HP ProBook 450 15.6 inch G9 Notebook PC

## Technical specifications

<b>Available Operating Systems</b>	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 <sup>1</sup> Windows 11 Pro (Windows 11 Enterprise or Windows 10 Enterprise available with a Volume Licensing Agreement) <sup>1</sup> Windows 11 Pro (preinstalled with Windows 10 Pro Downgrade) <sup>1,2</sup> FreeDOS
<b>Processor family<sup>6</sup></b>	12th Generation Intel® Core™ i3 processor 12th Generation Intel® Core™ i5 processor 12th Generation Intel® Core™ i7 processor
<b>Available Processors<sup>3,4,5,6</sup></b>	Intel® Core™ i3-1215U with Intel® UHD Graphics (1.2 GHz base frequency, up to 4.4 GHz with Intel® Turbo Boost Technology, 10 MB L3 cache, 6 cores, 8 threads) Intel® Core™ i5-1235U (1.3 GHz base frequency, up to 4.4 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 10 cores, 12 threads) Intel® Core™ i5-1240P (1.7 GHz base frequency, up to 4.4 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 12 cores, 16 threads) Intel® Core™ i7-1255U (1.7 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 10 cores, 12 threads) Intel® Core™ i7-1260P (1.6 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 18 MB L3 cache, 12 cores, 16 threads) Intel® Pentium® Gold 8505 with Intel® UHD Graphics (1.2 GHz base frequency, up to 4.4 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 5 cores, 6 threads) Intel® Celeron® 7305 with Intel® UHD Graphics (1.1 GHz base frequency, 8 MB L3 cache, 5 cores, 6 threads)
<b>Maximum memory</b>	32 GB DDR4-3200 MHz RAM; (Transfer rates up to 3200 MT/s); <sup>7</sup> Both slots are accessible/upgradeable by IT or self-maintainers only. Supports dual channel memory.
<b>Memory slots</b>	2 SODIMM
<b>Internal storage</b>	up to 1 TB PCIe® NVMe™ M.2 SSD TLC <sup>8</sup> 128 GB up to 512 GB PCIe® NVMe™ Value M.2 SSD <sup>8</sup> 128 GB up to 256 GB PCIe® NVMe™ Value M.2 SSD <sup>8,9</sup>
<b>Display size (diagonal, metric)</b>	39.6 cm (15.6")
<b>Display<sup>16,20,21</sup></b>	39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 400 nits, low power, 72% NTSC; 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, FHD (1920 x 1080), touch, IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC
<b>Available Graphics</b>	Integrated: Intel® UHD Graphics; Intel® Iris® X® Graphics <sup>16,17</sup> Discrete: NVIDIA® GeForce® MX570 (2 GB DDR6 dedicated); NVIDIA® GeForce® MX570A (2 GB DDR6 dedicated) <sup>18</sup> (Support HD decode, DX12, HDMI 2.1b.)
<b>Audio</b>	Dual stereo speakers, dual array microphones
<b>Ports and connectors</b>	1 USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4); 3 USB Type-A 5Gbps signaling rate (1 charging, 1 power); 1 AC power; 1 HDMI 2.1b; 1 stereo headphone/microphone combo jack; 1 RJ-45; (HDMI cable sold separately); Optional Ports: 1 External Nano SIM slot for WWAN <sup>15</sup>
<b>Input devices</b>	HP Premium Keyboard - spill resistant, optional backlit keyboard with drain and DuraKeys <sup>19</sup> ; Clickpad with multi-touch gesture support
<b>Communications</b>	(Compatible with Miracast-certified devices.); Realtek RTL8111HSH-CG 10/100/1000 GbE NIC <sup>14</sup> ; Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card, vPro®; Realtek Wi-Fi 6 RTL8852BE 802.11a/b/g/n/ax (2x2) and Bluetooth® 5.3 wireless card; Intel® XMM™ 7560 LTE Advanced Pro Cat 16
<b>Camera</b>	720p HD camera with temporal noise reduction (select models); IR Camera (select models) <sup>16</sup>
<b>Software</b>	HP Connection Optimizer; HP Hotkey Support; HP MAC Address Manager; HP Support Assistant; myHP; HP Privacy Settings; Touchpoint Customizer for Commercial; HP Notifications; HP Quick Touch; HP PC Hardware Diagnostics WindowsBuy Office (Sold separately) <sup>23</sup>
<b>Available software</b>	HP Smart Support <sup>57</sup>
<b>Security management</b>	Absolute persistence module; HP DriveLock and Automatic DriveLock; HP Secure Erase; HP Sure Click; HP Sure Sense; BIOS Update via Network; HP Sure Admin; HP BIOSphere Gen6; TPM 2.0 embedded security chip (Common Criteria EAL4+ and FIPS 140-2 Level 2 Certified); HP Sure Start Gen7; HP Wake on WLAN; HP Tamper Lock
<b>Security Software Licenses</b>	HP Wolf Pro Security Edition <sup>56</sup>
<b>Fingerprint reader</b>	Fingerprint sensor (select models)



# HP ProBook 450 15.6 inch G9 Notebook PC

## Technical specifications

<b>Management features</b>	HP Client Management Script Library (download); HP Image Assistant (download); HP Driver Packs (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Power Manager <sup>26,27</sup>
<b>Power</b>	HP Smart 65 W External AC power adapter; HP Smart 65 W EM External AC power adapter; HP Smart 45 W External AC power adapter; HP Smart 65 W USB Type-C <sup>®</sup> adapter; HP Smart 45 W USB Type-C <sup>®</sup> adapter <sup>37</sup>
<b>Battery type</b>	HP Long Life 3-cell, 42.75 Wh polymer; HP Long Life 3-cell, 51.3 Wh polymer <sup>36</sup> ; Battery is internal and not replaceable by customer. Serviceable by warranty.
<b>Battery life</b>	Up to 12 hours and 15 minutes <sup>22</sup>
<b>Dimensions</b>	35.94 x 23.39 x 1.99 cm; 6.9 x 52 x 30.5 cm (Package)
<b>Weight</b>	Starting at 1.74 kg; (Weight will vary by configuration.)
<b>Ecolabels</b>	EPEAT <sup>®</sup> registered configurations available; IT ECO Declaration; TCO Certified configurations available; EPEAT <sup>®</sup> Gold registered in the U.S.; SEPA; Taiwan Green Mark; Japan PC Green Label; KOECO <sup>39</sup>
<b>Energy star certified</b>	ENERGY STAR <sup>®</sup> certified
<b>Certification and compliance</b>	CECP
<b>Sustainable impact specifications</b>	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; 10% post-consumer recycled plastic; Ocean-bound plastic in speaker enclosure(s) <sup>40,41,42,43,44</sup>
<b>Warranty</b>	HP Services offers 1-year and 90 day software limited warranty options depending on country. Batteries have a default one year limited warranty. Refer to <a href="http://www.hp.com/support/batterywarranty/">http://www.hp.com/support/batterywarranty/</a> for additional battery information. On-site service and extended coverage is also available. HP Care Pack Services are optional extended service contracts that go beyond the standard limited warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: <a href="http://www.hp.com/go/cpc">http://www.hp.com/go/cpc</a> .



# HP ProBook 450 15.6 inch G9 Notebook PC

## Footnotes

### 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.
- <sup>3</sup> Intel processor and graphics options must be configured at the time of purchase.
- <sup>4</sup> 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.
- <sup>5</sup> HP Wolf Security for Business requires Windows 10 or higher, includes various HP security features and is available on HP Pro, Elite, Workstation, and RPOS products. See product details for included security features and OS requirements.
- <sup>6</sup> HP Power Manager requires Windows 10 or higher and is available from the Microsoft store.
- <sup>7</sup> HP 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 Pack.
- <sup>8</sup> MIL STD 810 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. Any accidental damage requires an optional HP Accidental Damage Protection Care Pack.
- <sup>9</sup> Laptop speaker enclosure and display bezel components contains 5 percent ocean bound plastic by weight.
- <sup>10</sup> Based on US EPEAT® registration according to IEEE 16801:2018 EPEAT®. EPEAT® status varies by country. Visit <http://www.epeat.net> for more information.
- <sup>11</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. Only available with three-year warranty.
- <sup>12</sup> Wi-Fi 6E requires a 6GHz 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. The specifications for Wi-Fi 6E 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 Wi-Fi 6E devices. Only available in countries where Wi-Fi 6E is supported.
- <sup>13</sup> Wi-Fi® supporting gigabit data rate is achievable with Wi-Fi 6E (802.11ax) when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 160MHz channels.
- <sup>14</sup> Recharges your battery up to 50% within 30 minutes when the system is off or in standby mode. Power adapter with a minimum capacity of 65 watts is required. After charging has reached 50% capacity, charging will return to normal. Charging time may vary +/-10% due to System tolerance.
- <sup>15</sup> Battery must be configured at the time of purchase.

### Specification 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> 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.
- <sup>5</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>6</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>7</sup> 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> Second storage is only available with non-WWAN base unit and Primary M.2 storage.
- <sup>10</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. 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>11</sup> Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 (802.11ax) is backwards compatible with prior 802.11 specs.
- <sup>12</sup> Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.
- <sup>13</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>14</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>15</sup> SIM slot is not user accessible without WWAN configuration.
- <sup>16</sup> FHD/HD content required to view FHD/HD images.
- <sup>17</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.
- <sup>18</sup> 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).
- <sup>19</sup> Backlit keyboard is an optional feature.
- <sup>20</sup> Resolutions are dependent upon monitor capability, and resolution and color depth settings.
- <sup>21</sup> Actual brightness will be lower with touchscreen.
- <sup>22</sup> Windows MM18 battery life will vary depending on various factors including 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 [www.bapca.com](http://www.bapca.com) for additional details.
- <sup>23</sup> HP Support Assistant requires Windows and Internet access.
- <sup>24</sup> HP Driver Packs not preinstalled, however available for download at <http://www.hp.com/go/clientmanagement>.
- <sup>25</sup> HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.
- <sup>26</sup> Absolute agent is shipped turned off, and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: <http://www.absolute.com/company/legal/agreements/computrace-agreement>. Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software.
- <sup>29</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>30</sup> HP Sure Click requires Windows 10 Pro or higher or Enterprise. See <https://bit.ly/2PrLT6A>, SureClick for complete details.
- <sup>31</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>32</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>33</sup> HP BIOSphere Gen6 features may vary depending on the platform and configuration.
- <sup>34</sup> HP Sure Start Gen7 is available on select HP PCs and requires Windows 10 and higher.
- <sup>35</sup> HP Fingerprint sensor is an optional feature that must be configured at purchase.
- <sup>36</sup> For new batteries, actual battery Watt-hours (Wh) may differ from the design capacity and may have a full charge capacity that differs by up to 10, which is typical for lithium-ion batteries. Battery capacity naturally decreases over time and with use, depending on several factors such as battery health management settings, shelf life, temperature, environment, loaded apps, features, system configuration, and power settings.
- <sup>37</sup> Availability may vary by country.
- <sup>38</sup> 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 laws, 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.
- <sup>39</sup> Based on US EPEAT® registration according to IEEE 16801:2018 EPEAT®. Status varies by country. Visit [www.epeat.net](http://www.epeat.net) for more information.
- <sup>40</sup> External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
- <sup>41</sup> Percentage of ocean-bound plastic contained in each component varies by product.
- <sup>42</sup> 100% outer box packaging and corrugated cushions made from sustainably sourced certified and recycled fibers.
- <sup>43</sup> Recycled plastic content percentage is based on the definition set in the IEEE 16801:2018 standard.
- <sup>44</sup> Molded pulp cushions made from 100% recycled wood fiber and organic materials.
- <sup>56</sup> HP Wolf Pro Security Edition is available preloaded on select SKUs, and, depending on the HP product purchased, includes a license with a term length communicated to you at purchase and in your order confirmation email. The HP Wolf Pro Security Edition software is licensed under the license terms of the HP Wolf Security Software - End-User license Agreement (EULA) that can be found at [https://support.hp.com/us-en/document/ish\\_3875769-3873014-16](https://support.hp.com/us-en/document/ish_3875769-3873014-16) as that EULA is modified by the following: 7. Term. Unless otherwise terminated earlier pursuant to the terms contained in this EULA, the license for the HP Wolf Pro Security Edition is effective upon 4 months after the date the HP Product was shipped by HP and will continue for the term communicated to you at purchase and in your order confirmation email ("Initial Term"). At the end of the Initial Term you may either (a) purchase a renewal license for the HP Wolf Pro Security Edition from HP.com, HP Sales or an HP Channel Partner, or (b) continue using the standard versions of HP Sure Click and HP Sure Sense at no additional cost with no future software updates or HP Support. Notwithstanding the foregoing, the license shall expire no later than one year after the fixed term of the subject license ends.
- <sup>57</sup> HP Smart Support automatically collects the telemetry necessary upon initial boot of the product to deliver device-level configuration data and health insights and is available preinstalled on select products, thru HP Factory Configuration Services; or it can be downloaded. For more information about how to enable HP Smart Support or for download, please visit <http://www.hp.com/smart-support>.

