# HP ProBook 450 G5 Notebook PC



Power, style and value, just what your growing business needs.

Full-featured, thin, and light, the HP ProBook 450 lets professionals stay productive in the office and on the go. Stylish design, linear precision, and subtle curvature plus optional Quad Core<sup>2</sup> performance and long battery life make this ProBook essential for today's workforce.



HP recommends Windows 10 Pro.

#### Powerful processing

 Get through your deadline-driven, multitasking day with optional 7th Gen Intel® Core™ i3³ or 8th Gen Core™ i5/i7 Quad Core™ processors² and optional NVIDIA® GeForce® discrete graphics⁴.

#### Stylish and durable ultraslim design

• The HP ProBook 450 delivers stylish design to every business. An ultraslim chassis in a refined new natural silver finish includes a keyboard deck made of durable premium stamped aluminum.

### Designed for docking

 Quickly transition to desktop productivity with a single cable that supports docking via USB-C<sup>™</sup> which allows you to connect multiple external displays<sup>4</sup>, a power source, and a gigabit network connection through optional docks<sup>4</sup>.

#### Immersive experience

- Experience vivid audio engagement and an easy conferencing experience with the Skype for Business™ Certified HP ProBook 450 with HP Audio Boost, HP Noise Cancellation.
- Experience the new features of Windows 10 Pro<sup>1</sup> on the thin, light, touch<sup>4</sup> optional HP ProBook 450.
- Fortify your security by using multiple factors of authentication including fingerprints and facial recognition.
- Get the best of both worlds with dual solid-state and hard drive storage options from HP.
- Battery life that gets you through the workday and beyond. Fast charge 90% in 90 minutes<sup>5</sup>.
- Stand up to the workload with a ProBook that is designed to pass MIL-STD 810G testing<sup>7</sup>.
- Help suppress ambient noise including keyboard clicks with HP Noise Cancellation.
- Help make good speakers sound great with the HP Audio Boost.

## HP ProBook 450 G5 Notebook PC Specifications Table







	Windows 10 Pro 64 – HP recommends Windows 10 Pro. <sup>1</sup>
Available Operating Systems	Windows 10 Pro (National Academic License) <sup>1,2</sup> Windows 10 Home 64 <sup>1</sup> Windows 10 Home Single Language 64 <sup>1</sup> FreeDOS 2.0
Processor family <sup>5</sup>	8th Generation Intel® Core™ i7 processor (i7-8550U); 8th Generation Intel® Core™ i5 processor (i5-8250U); 8th Generation Intel® Core™ i3 processor (i3-8130U); 7th Generation Intel® Core™ i5 processor (i5-7200U); 7th Generation Intel® Core™ i3 processor (i3-7100U); 7th Generation Intel® Core™ i3 processor (i3-7020U); 6th Generation Intel® Core™ i3 processor
Available Processors <sup>3,4,5</sup>	Intel® Core™ i3-8130U with Intel® UHD graphics 620 (2.2 GHz base frecuency, up to 3.4 GHz with Intel® Turbo Boost Technology, 4 MB cache, 2 cores); Intel® Core™ i3-7100U with Intel® HD Graphics 620 (2.4 GHz, 3 MB cache, 2 cores); Intel® Core™ i7-8550U with Intel® UHD graphics 620 (1.8 GHz base frequency, up to 4 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores); Intel® Core™ i5-8250U with Intel® UHD Graphics 620 (1.6 GHz base frequency, up to 3.4 GHz with Intel® Turbo Boost Technology, 6 MB cache, 4 cores); Intel® Core™ i5-7200U with Intel® HD Graphics 620 (2.5 GHz base frequency, up to 3.1 GHz with Intel® Turbo Boost Technology, 3 MB cache, 2 cores); Intel® Core™ i3-6006U with Intel® HD Graphics 520 (2 GHz, 3 MB L3 cache, 2 cores); Intel® Core™ i3-7020U with Intel® HD Graphics 620 (2.5 GHz base frequency, up to 3.1 GHz with Intel® Turbo Boost Technology, 3 MB cache, 2 cores)
Chipset	Chipset is integrated with processor
Display size (diagonal)	15.6 <sup>*12,14</sup>
Maximum memory	32 GB DDR4-2400 SDRAM <sup>6</sup> SODIMM slots are customer accessible/upgradeable; Supports dual channel memory
Memory slots	2 SODIMM
Internal storage	up to 1 TB SATA (5400 rpm) <sup>7</sup> up to 500 GB SATA (7200 rpm) <sup>7</sup> up to 500 GB (8 GB cache) SATA SSHD (5400 rpm) <sup>7</sup> up to 500 GB (8 GB cache) SATA SSHD (5400 rpm) <sup>7</sup> up to 512 GB M.2 PCIe NVMe TLC SSD <sup>7,8</sup> up to 256 GB M.2 PCIe NVMe SSD <sup>7,8</sup> up to 128 GB M.2 SATA TLC SSD <sup>7</sup>
Display	15.6" diagonal HD touch screen, 220 cd/m2, 45% sRGB (1366 x 768); 15.6" diagonal FHD UWVA anti-glare flat LED backlit, 220 cd/m2, 45% sRGB (1920 x 1080); 15.6" diagonal HD SVA anti-glare LED-backlit, 220 cd/m2, 45% sRGB (1366 x 768) <sup>12,14</sup>
Available Graphics	Integrated: Intel® UHD Graphics 620; Intel® HD Graphics 620; Intel® HD Graphics 520; Intel® HD Graphics <sup>12</sup> Discrete: NVIDIA® GeForce® 930MX (2 GB DDR3 dedicated, switchable) <sup>33</sup>
Audio	2 Integrated stereo speakers; Integrated dual-microphone array
Wireless technologies	Intel® Dual Band Wireless-AC 8265 802.11a/b/g/n/ac (2x2) WiFi and Bluetooth® 4.2 Combo (non-vPro™); Intel® Dual Band Wireless-AC 3168 802.11 a/b/g/n/ac (1x1) Wi-Fi® and Bluetooth® 4.2 Combo (non-vPro™); Realtek 802.11ac (1x1) Wi-Fi® and Bluetooth® 4.2 Combo; Realtek 802.11ac (2x2) Wi-Fi® and Bluetooth® 4.2 Combo <sup>9,10</sup>
Expansion slots	1 multi-format digital media reader (Supports SD, SDHC, SDXC.)
Ports and Connectors	1 USB 3.1 Type-C™ Gen 1 (Power Delivery, DisplayPort™); 2 USB 3.0; 1 USB 2.0 (power port); 1 HDMI 1.4b; 1 VGA; 1 RJ-45; 1 AC power; 1 headphone/microphone combo jack <sup>11</sup>
Input devices	HP Premium Keyboard; Full-size chiclet keyboard with numeric keypad, optional backlit; Clickpad with image sensor, multi-touch gestures enabled, taps enabled as default;
Communications	Realtek RTL8111HSH Gigabit Ethernet ;
Camera	HD camera; HD IR webcam <sup>12,13</sup>
Available Software	Native Miracast Support; HP LAN Protection; HP Velocity; HP 3D DriveGuard 6 (Windows required); HP ePrint Driver + JetAdvantage; HP Hotkey Support; HP Recovery Manager; HP JumpStart; HP Support Assistant; HP Noise Cancellation Software; Buy Office; Bing search for IE11; HP Connection Optimizer <sup>21,22,23</sup>
Security management	HP BIOSphere Gen4; HP Client Security Gen3; HP DriveLock and Automatic DriveLock; TPM 2.0; Windows Defender <sup>27,28,29,30,31,32,34</sup>
Management features	HP Driver Packs; HP System Software Manager (SSM); HP BIOS Config Utility (BCU); HP Client Catalog; HP Management Integration Kit for Microsoft System Center Configuration Manager; LANDESK Management <sup>24,25,26</sup>
Power	45 W HP Smart AC adapter; 45 W Smart AC adapter 2-prong (Japan only); 65 W Smart AC adapter; 65 W EM Smart AC adapter <sup>17</sup>
Battery type	HP 3-cell, 48 Wh Long Life Li-ion <sup>16</sup>
Battery life	Up to 14 hours and 30 minutes <sup>15</sup>
Dimensions	14.8 x 10.4 x 0.82 in (non-touch); 14.8 x 10.4 x 0.9 in (touch)
Weight	Starting at 4.64 lb
Energy efficiency compliance	ENERGY STAR® certified; EPEAT® Gold <sup>19</sup>
Environmental specifications	Low halogen <sup>20</sup>
Warranty	3 year and 1 year limited warranties and 90 day software limited warranty options depending on country. Batteries have a default one year limited warranty except for Long Life batteries which will have same 1 year or 3 year limited warranty as the platform. Onsite 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 http://www.hp.com/go/cpc

## HP ProBook 450 G5 Notebook PC

#### Accessories and services (not included)

HP USB-C Universal Dock



Transform your HP notebook or tablet into a complete desktop experience with the HP USB-C Universal Dock, which delivers USB-C™ charging¹ and connections for your network, dual 4K displays, and accessories with one cable connection. Product number: 1MK33AA

HP 65W Smart AC Adapter



Conserve battery life, be productive, and get uninterrupted power with the HP 65W Smart AC Adapter, which detects and regulates the correct electrical current for your HP Business Notebook and select HP Docking Stations. <sup>1</sup> Product number: H6Y89AA

HP Slim USB Keyboard and Mouse



Work smart and maximize your workspace with the stylish HP Slim USB Keyboard and Mouse, designed to complement the 2015 class of HP Business PCs. Product number: T6T83AA

**HP Essential Top Load Case** 



The HP Essential Top Load Case is a light and durable notebook carrying case that includes high-density foam cushioning to protect your notebook (up to 15.6 diagonal inches.) while traveling between meetings or in and out of the office. Product number: H2W17AA

**HP Hot Desk Stand** 



Redefine workspace design with the HP Hot Desk Stand, a ready-to-go touchdown station that supports a monitor and plug-and-play dock, enhances productivity, and provides a clean and comfortable workspace for your mobile and flexible workforce at an affordable price

Product number: W3Z73AA

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 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: UK726E** 

#### HP ProBook 450 G5 Notebook PC

#### Messaging Footnotes

- 1 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> Quad Core processor sold separately or as an optional feature.

  <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 is not a measurement of higher performance.
- 5 Recharges the battery up to 90% within 90 minutes when the system is off or in standby mode when used with the power adapter provided with the notebook and no external devices are connected. After charging has reached 90% capacity,
- charging speed will return to normal. Charging time may vary +/-10% due to System tolerance.

  MIL STD 810G testing is pending and 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 Pack.

#### **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> Note: Some devices for academic use will automatically be updated to Windows 10 Pro Education with the Windows 10 Anniversary Update. Features vary; see https://aka.ms/ProEducation for Windows 10 Pro Education feature information.
- <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 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 NOTE: 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.
- 6 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.

  7 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>8</sup> Note: PCIe SSD hard drives not available for models with Celeron processor
- <sup>9</sup> 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.
- 10 WWAN module 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.
- 11 HDMI cable sold separately.12 HD content required to view HD images
- 13 Internet access required.
- 14 Sold separately or as an optional feature.

  15 Windows 10 MM14 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.bapco.com for additional details.  $^{\rm 16}$  Battery is internal and not replaceable by customer. Serviceable by warranty.
- 17 Availability may vary by country.
- 18 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 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.

  19 EPEAT® registered where applicable. EPEAT registration varies by country. See 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.
- 20 External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

  21 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

  22 HP ePrint Drive 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/eprintcenter). Print times and connection speeds may vary.
- <sup>23</sup> HP Support Assistant requires Windows and Internet Access.
   <sup>24</sup> HP Driver Packs is not preinstalled, however available for download at http://www.hp.com/go/clientmanagement.
- <sup>25</sup> HP Management Integration Kit for Microsoft System Center Configuration Manager and HP Management Integration Kit can be downloaded from http://www8.hp.com/us/en/ads/clientmanagement/overview.html <sup>26</sup> LANDESK Management subscription required. <sup>27</sup> HP BIOSphere Gen4 requires Intel® 7th or 8th Generation processors.

- <sup>28</sup> HP Client Security Suite Gen3 requires Windows and Intel<sup>®</sup> or AMD 7th or 8th Generation processors.

  <sup>29</sup> Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88. Supported on Elite platforms with BIOS version F.03 or higher
- 30 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
- HP Password Manager requires Internet Explorer or Chrome or FireFox. Some websites and applications may not be supported. User may need to enable or allow the add-on / extension in the internet browser
- 32 Windows Defender Opt in and internet connection required for updates.
  33 NVIDIA® technology requires an Intel® processor, plus an NVIDIA® GeForce® discrete graphics configuration and is available on Windows 10 Professional 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>34</sup> HP Drive Lock is not supported on NVMe<sup>™</sup> drives

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