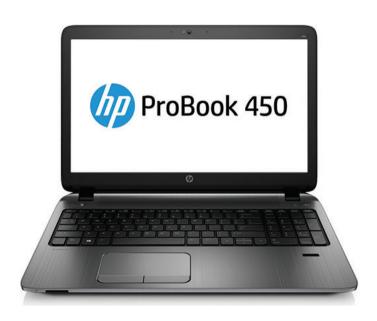
# HP ProBook 450 G2 Notebook PC



# **Equipped for the demands of your work**

The sleek HP ProBook 450 G2 with optional 10-point touchscreen and the latest generation technologies delivers powerful performance in the office or on the go. Proven reliability and comprehensive HP security features help keep your data and investment protected.



## **HP** recommends Windows.

- Windows 8.17
- Screen Size: 39,6 cm (15.6") diagonal









#### Designed for mobility.

• Travel in style with the updated design of the optional FHD,<sup>2</sup> or HD touch,<sup>1</sup> 39,6 cm (15.6") diagonal HP ProBook 450 G2 featuring a new soft touch paint finish on the LCD cover and brushed aluminum keyboard deck.

#### Powerful processing.

Power through projects with the latest 4th generation Intel<sup>®</sup> Core<sup>™</sup> i3/i5/i7 processors<sup>3</sup> and optional discrete<sup>2</sup>
 AMD Radeon<sup>™</sup> graphics with switchable graphics support<sup>4</sup> on the stunning 39,6 cm (15.6") diagonal, optional FHD or HD+ touchscreen<sup>3</sup> of the HP ProBook 450 G2.

### Safeguard data and devices.

Help keep sensitive data secure with comprehensive security features like HP Client Security,<sup>5</sup> and HP BIOS
Protection,<sup>6</sup> as well as the embedded TPM 1.2.

#### Featuring

- Guard your data, device and identity with HP Client Security.5
- HP BIOS Protection's automated recovery restores a copy of the BIOS from a partition on the hard drive if crisis strikes.
- With TPM 1.2 your critical data has protection with hardware-based encryption keys.
- Rest easy with a ProBook that endures 115,000 hours of testing to help ensure reliability in the most demanding work environments.
- The simplicity of optional touch<sup>1</sup> enriches business interaction with Windows 8.1.<sup>7</sup>
- Help protect your ProBook from minor spills with a backlit<sup>8</sup> spill-resistant keyboard.
- Power through your day with speed and performance. Get the latest in processing technology with your choice of 4th generation Intel® Core™ i3/i5/i7 processors.³
- Experience great visual performance with optional AMD discrete graphics<sup>2</sup> on optional FHD<sup>2</sup> displays.
- Gain faster, more reliable wireless than ever—with optional 5G Wi-Fi support.9
- Get to work virtually anywhere in the world with fast, reliable, and secure wireless connections using optional Qualcomm® Gobi™ 4G LTE¹º connectivity and avoid added expenses of fee based Wi-Fi hotspots on the road with data plans to fit your enterprise needs.

# **HP ProBook 450 G2 Notebook PC Specifications Table**

# **HP** recommends Windows.







Available Operating System	Windows 8.1 Pro 64 <sup>1</sup>
Transfer Operating System	Windows 8.1 64 <sup>1</sup> Windows 7 Professional 64 (available through downgrade rights from Windows 8.1 Pro 64) <sup>2</sup> Windows 7 Professional 64 <sup>1</sup>
	FreeDOS 2.0 Ubuntu Linux <sup>3</sup>
Processor Family <sup>4</sup>	Intel® Core™ i7 processor; Intel® Core™ i5 processor; Intel® Core™ i3 processor; Intel® Celeron® processor
Available Processors <sup>4,5</sup>	Intel® Core™ i7-4510U with Intel HD Graphics 4400 (2 GHz, up to 3.1 GHz with Intel Turbo Boost Technology, 4 MB cache, 2 cores); Intel® Core™ i5-4210U with Intel HD Graphics 4400 (1.7 GHz, up to 2.7 GHz with Intel Turbo Boost Technology, 3 MB cache, 2 cores); Intel® Core™ i3-4030U with Intel HD Graphics 4400 (1.9 GHz, 3 MB cache, 2 cores); Intel® Celeron® 2957U with Intel HD Graphics (1.4 GHz, 2 MB cache, 2 cores)
Chipset	Chipset is integrated with processor
Maximum Memory	Up to 16 GB 1600 MHz DDR3L SDRAM
Memory Slots	2 SODIMM
Internal Storage	up to 750 GB SATA (7200 rpm) <sup>7</sup> 320 GB up to 1.5 TB SATA (5400 rpm) <sup>7</sup> up to 128 GB SSD <sup>7</sup> up to 500 GB SATA SSHD (5400 rpm) <sup>7</sup>
Optical Storage	Blu-ray ROM DVD+/-RW SuperMulti DL; DVD+/-RW SuperMulti DL; DVD-ROM <sup>8,9</sup> (option of no optical drive)
Display	39,6 cm (15.6") diagonal LED-backlit HD anti-glare (1366 x 768); 39,6 cm (15.6") diagonal FHD anti-glare LED-backlit (1920 x 1080); 39,6 cm (15.6") diagonal HD shatter, scratch, and smudge resistant LED-backlit touch screen (1366 x 768) <sup>12,13</sup>
Available Graphics	Integrated: Intel HD Graphics 4400 (Intel i3, i5, and i7 Dual-Core configurations); Intel HD Graphics (Intel Celeron configurations) Switchable Discrete: AMD Radeon R5 M255 (1 GB or 2 GB DDR3 dedicated, switchable) <sup>28</sup>
Audio	DTS Sound+; Integrated stereo speakers; Integrated digital microphone (dual-microphone array when equipped with optional webcam); Function keys for microphone mute, volume up, and volume down; Headphone/microphone combo jack
Wireless Technologies	Realtek 802.11b/g/n (1x1) and Bluetooth® 4.0 Combo; Intel Dual Band Wireless-AC 3160 802.11a/b/g/n/ac (1x1) WiFi and Bluetooth® 4.0 Combo; HP hs3110 HSPA+ Mobile Broadband; HP lt4112 LTE/HSPA+ Qualcomm® Gobi <sup>™</sup> 4G Mobile Broadband $^{10,11,29}$
Communications	Realtek Ethernet (10/100/1000)
Expansion Slots	1 multi-format digital media reader (supports SD, SDHC, SDXC)
Ports and Connectors	2 USB 3.0; 2 USB 2.0; 1 HDMI; 1 headphone/microphone combo; 1 AC power; 1 RJ-45; 1 VGA
Input Device	Full-sized, spill resistant keyboard with numeric keypad; Full-sized, spill resistant backlit keyboard with numeric keypad (optional) <sup>12</sup> Touchpad with gestures support, on/off button with LED indicator, two-way scroll, two pick buttons 720p HD webcam (select models) <sup>13</sup>
Webcam	720p HD webcam (select models) <sup>13</sup>
Available Software	Absolute Persistence; HP Device Access Manager with Just In Time Authentication; HP File Sanitizer; HP Client Security; HP BIOS Protection; HP Disk Sanitizer; HP DriveLock; HP SpareKey; HP Connection Manager; HP GPS and Location; HP Mobile Connect; HP Wireless Hotspot; HP ePrint Driver; HP Hotkey Support; HP PageLift; HP Recovery Manager; HP Support Assistant; CyberLink PowerDVD; CyberLink YouCam BE; Foxit PhantomPDF Express; Buy Office 14.15.16.17.20.21.23.30.32.33
Security Management	Standard: HP Client Security, Microsoft Defender (models with Windows 8), Drive Encryption, HP BIOS Protection, Security lock slot, TPM 1.2 Embedded Security Chip; Optional: Intel® Identity Protection, HP Fingerprint reader <sup>25,30,31</sup>
Power	65 W Smart AC adapter; 65 W EM Smart AC adapter; 45 W Smart AC adapter 4-cell, 44 WHr Li-ion; 4-cell, 40 WHr Long Life Li-ion
Dimensions	37.5 x 26.28 x 2.34 to 2.55 cm (front to rear) (non-touch); 37.5 x 26.32 x 2.5 to 2.71 cm (front to rear) (touch)
Weight	Starting at 2.06 kg (Lowest weight configuration. Weight will vary by configuration. See QuickSpecs.)
Environmental	Low halogen <sup>26</sup>
Energy Efficiency Compliance	ENERGY STAR® qualified configurations available
Warranty	1-year limited warranty (upgrades available, sold separately), 1-year warranty on primary battery

# **HP ProBook 450 G2 Notebook PC**

## **HP** recommends Windows.

## Accessories and services (not included)

HP 3005pr USB 3.0 Port Replicator Everything you need every day, ready with one simple connection. The HP 3005pr USB 3.0 Port Replicator is our ultimate platform-independent hot desking solution. Get online, make up to six of your everyday USB devices immediately available, and expand your productivity with connection to two external displays—all through one USB 3.0 cable.

**Product number: H1L08AA** 





The HP Comfort Grip Wireless Mouse features a 30-month battery life and a bold, modern design that integrates seamlessly with HP Business Notebooks.

Product number: H2L63AA

HP Ultraslim Keyed Cable Lock



Secure your HP Ultrabook™ or laptop PC quickly and easily with the HP Ultraslim Keyed Cable Lock.

Product number: H4D73AA

HP Business Top Load Case



 ${\it Comfortably carry your notebook and every day accessories in the stylish and durable HP\ Business\ Top\ Load\ Case.}$ 

Product number: H5M92AA

HP 90W Slim AC Adapter



Product number: H6Y83AA



3-year Next Business Day Onsite Receive 3 years of next business day onsite repair from an HP-qualified technician for your computing device, if the issue cannot be solved remotely

Product number: UK703E



## Learn more at

www.hp.eu/hpoptions

## HP ProBook 450 G2 Notebook PC

### **HP** recommends Windows.

### **Messaging Footnotes**

- 1 HD touchscreen is expected to be available in Summer 2014 as an optional feature
- Sold separately or as an optional feature.
- <sup>3</sup> Multi-Core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. 64-bit computing system required. Performance will vary depending on your hardware and software configurations. Intel's numbering is not a measurement of higher performance.

  AMD Dynamic Switchable Graphics technology requires either an AMD \*A' series APU or an Intel processor, plus an AMD Radeon™ discrete graphics configuration and is not available on FreeDOS and Linux OS. With AMD Dynamic Switchable 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>5</sup> Requires Windows.
- 6 HP tools partition with HP BIOS required for automatic recovery
- 7 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. See http://www.microsoft.com.

  8 Backlit keyboard is expected to be available in Summer, 2014 as an optional feature.
- <sup>9</sup> The specifications for the SG WiFl aka 802.11 ac 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 802.11 ac WLAN devices. Wireless access point and Internet service required and not included. Availability of public wireless access points and repair service required and not included. Availability of public wireless access points limited.

  10 4G LTE WWAN is not available on all products, in all regions and requires factory configuration and separately purchased service contract. Check with service provider for coverage and availability. Connection speeds will vary due to location, environment,
- network conditions, and other factors

#### **Technical specifications disclaimers**

- 1 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. See http://www.microsoft.com for details
- 2 This system is preinstalled with Windows 7 Professional software and also comes with a license and media for Windows 8.1 Pro 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.

  3 Fingerprint reader, WWAN, touch display and TPM are not supported with Linux
- <sup>4</sup> Multi-Core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. 64-bit computing system required. Performance will vary depending on your hardware and software configurations. Intel's numbering is not a measurement of higher performance.

  <sup>5</sup> Intel Core i3-4005U processor planned to be available in July 2014.

- 7 For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30GB (for Windows 8) is reserved for system recovery software.

  8 Double-layer discs can store more data than single layer discs. However, double-layer discs burned with this drive may not be compatible with many existing single-layer DVD drives and players. Note that this drive cannot read or write to 2.6 GB single-sided/5.2 GB double-sided - version 1.0 media. Don't copy copy-right protected materials.
- \*\*With Blu-Ray certain disc, digital connection, compatibility and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. In order for some Blu-ray titles to play, they may require a DVI or HDMI digital connection and your display may require HDCP support. HD-DVD movies cannot be played on this Blu-Ray drive.

  10 Wireless is an optional add- on feature and requires wireless access point and Internet service. Availability of public wireless access points limited.
- 11 Mobile Broadband is an optional feature and requires factory configuration. 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.
- 12 Optional backlit keyboard and touchscreen are planned to be available in July 2014
- <sup>13</sup> HD content required to view HD images.
- <sup>14</sup> The HP Wireless Hotspot applications equires an active internet connection and separately purchased data plan. While HP wireless hotspot is active, on-device applications will continue to work and will use the same data plan as the wireless hotspot. Wireless hotspot data usage may incur additional charges. Check with your service provider for plan details. Requires Windows 8.1 or HP Connection Manager for Windows 7.

  15 ePrint requires an Internet connection to HP web-enabled printer. HP ePrint account registration required. For a list of eligible printers, supported documents and image types, and for complete details, see wwwhp.com/eprint

- 16 HP Mobile Connect is available in select EMEA countries and requires a compatible CDMA or HSPA mobile broadband module and prepaid service purchase. Find coverage and availability for your service area at www.hp.com/go/mobileconnect.

  17 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. If Data Delete is utilized, the Recovery Guarantee payment is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either create a PIN or purchase one or more RSA SecurID tokens from Absolute Software.
- 18 HP Drive Encryption requires Windows. Data is protected prior to Drive Encryption login. Turning the PC off or into hibernate logs out of Drive Encryption and prevents data access
- 19 The Computrace agent is shipped turned off, and must be activated by customers when they purchase a subscription. Subscriptions can be purchased for terms ranging from one to multiple years. Service is limited, check with Absolute for availability outside the
- 20. File Sanitizer is for the use cases outlined in the DOD 5220.22-M Supplement. Does not support Solid State Drives (SSDs). Initial setup required. Web history deleted only in Internet Explorer and Firefox browsers and must be user enabled.
- 21 HP PageLift requires Windows 8.
  23 HP Support Assistant: internet access required
- The support reasonable in the first access required and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

- 28 AMD Dynamic Switchable Graphics 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).

  29 The specifications for the 5G WiFi aka 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. Wireless access point and Internet service required and not included. Availability of public wireless access points limited.
- 30 HP Client Security requires Windows.
- 31 Microsoft Defender requires internet access.
- <sup>32</sup> Disk Sanitizer is for the use cases outlined in the DOD 5220.22-M Supplement. Does not support Solid State Drives (SSDs). Requires Windows.
- 33 DriveLock does not support Self Encrypting HDs (SEDs) if the encryption PIN is enabled.

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