

HP recommends Windows.

#### Get a hands—on experience.

Be more hands—on. Work more naturally with 10—point touch that truly makes the most of Windows 8.<sup>1</sup>All your work should feel this easy.

Reach out and touch this sleek, flat—panel display. It's perfect for tapping, swiping, and navigating through your day with ease.

#### All—new industrial design.

Get the technology you trust from HP, with cutting—edge style that looks and feels the way you want. DuraFlex® paint and an aluminum palm rest keep your HP ProBook looking good, with fewer scuffs and scratches.

Work without the weight. The HP ProBook 450 is thin, light, and always in style.

You have to be quick. The speed of the Intel processor helps you work faster. Now data is faster than ever. With USB 3.0, you'll get faster transfer speeds and increased bandwidth than USB 2.0.

#### Protect your work.

HP Client Security software suite helps you encrypt your hard drive, permanently delete unwanted or discarded data, restrict unauthorized access, and more.

Stay one—step ahead of hacks and attacks. Built—in security safeguards your HP ProBook against viruses, detects possible corruption, and alerts you to unauthorized changes.

Stay up and running. HP BIOS Protection offers enhanced protection against virus attacks and other security threats, and is designed to help prevent data loss and reduce

downtime.<sup>18</sup>

No more remembering passwords. HP Password Manager<sup>19</sup> lets you quickly log in to various online accounts. Now your passwords can be longer and more secure.

#### Work in more places.

Untether yourself from the office. Stay productive with a responsive solid—state hard drive that keeps business materials within reach.

Work in more places with optional high—speed wireless connectivity,<sup>8</sup> including 4G LTE<sup>20</sup> and HSPA+ WWAN.<sup>21</sup> With HP Wireless Hotspot, easily share your internet connection with colleagues to get productive fast.<sup>22</sup>

Wherever you go, your printer can always be close at hand - with HP ePrint. Now you can print from virtually anywhere.<sup>23</sup>

#### Tough on the job.

Built from the core up with durable materials.

Sip while you work - no worries. This metal keyboard deck and spill—resistant keyboard can help protect your system from minor spills.

HP ProBooks undergo challenging tests so you don't have to. During the HP Total Test Process, PCs experience 115,000 hours of performance trials to ensure they can withstand rigorous work environments.

Bumps happen. HP 3D DriveGuard helps protect your data when you're on the go by sensing sudden movement and protecting the hard drive.<sup>18</sup>



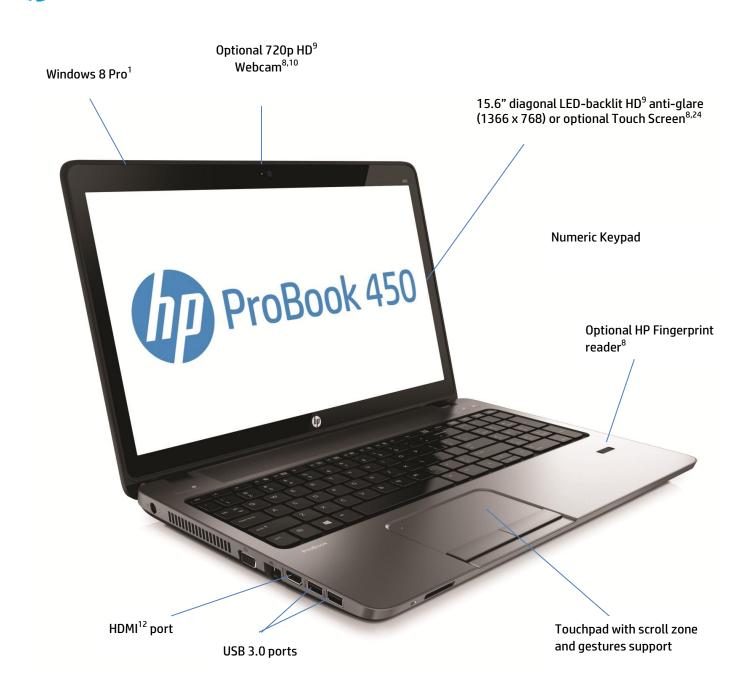
# HP ProBook 450 Notebook PC

### SPECIFICATIONS

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Product Name	HP ProBook 450 G0 Notebook PC
Operating system	Preinstalled: Windows 8 Pro 64 <sup>1</sup> Windows 7 Professional (available through downgrade rights from Windows 8 Pro) <sup>2</sup> Windows 8 64 <sup>1</sup> Windows 7 Professional 64 <sup>3</sup> Windows 7 Home Premium 64 <sup>3</sup> Windows 7 Home Basic 64 <sup>3</sup> SUSE Linux Enterprise Desktop 11 FreeDOS
Processor	3 <sup>rd</sup> Generation Intel® Quad—Core <sup>TM</sup> Core <sup>4</sup> i7, Dual—Core <sup>TM 4</sup> i5 , and i3, Celeron and Pentium
Chipset	Mobile Intel <sup>®</sup> HM76 Express
Memory	DDR3L SDRAM, 1600 MHz, two slots supporting dual—channel memory, <sup>5</sup> 2/4/8 GB SODIMMs, up to 16 GB total <sup>6</sup>
Internal Storage	320/500/750 GB 5400 rpm SMART SATA II HDD; <sup>7</sup> 500 GB 7200 rpm SMART SATA II HDD; <sup>7</sup> 500 GB 5400 rpm SMART SATA II Hybrid HDD; <sup>7</sup> 1TB 5400 rpm SMART SATA II HDD; <sup>7,27</sup> 128 GB 2.5" Solid State Drive <sup>7,27</sup>
Removable Storage	Fixed 9.5 mm SATA optical drive: DVD+/–RW SuperMulti DL Drive; <sup>8</sup> Blu—ray ROM DVD+/—RW SuperMulti DL Drive; <sup>8, 17</sup> DVD— ROM and option of no optical drive
Display	15.6" diagonal LED—backlit HD <sup>9</sup> anti—glare (1366 x 768); 15.6" diagonal LED—backlit HD <sup>9</sup> anti—glare with Touch Display supports anti—scratch, anti—smudge, anti—reflection and anti—shatter (1366 x 768) <sup>27</sup>
Graphics	I <b>ntegrated</b> : Intel® HD <sup>9</sup> Graphics 4000 (3 <sup>rd</sup> Generation Intel Quad—Core i7 and Dual—Core i5 and i3); Intel HD <sup>9</sup> Graphics (Celeron and Pentium configurations) <b>Discrete:</b> AMD RadeonTM HD <sup>9</sup> 8750M, with 1 or 2 GB dedicated DDR3 video memory <sup>11</sup>
Audio/Visual	DTS Sound+, stereo speakers, single integrated digital microphone or dual array microphone on models with optional 720p HD <sup>9</sup> Webcam <sup>8,10</sup>
Wireless Support	HP hs3110 HSPA+ Mobile Broadband Module <sup>8,10,21</sup> ; HP lt4112 LTE/HSPA+ Gobi 4G Module <sup>8,10,20</sup> Atheros 802.11 b/g/n 1x1; <sup>8,26</sup> Ralink 802.11 b/g/n 1x1 with Bluetooth v4.0 combo; <sup>8,26</sup> Broadcom 802.11 a/b/g/n 2x2 with Bluetooth v4.0 Combo; <sup>8,26</sup> Intel 802.11 a/b/g/n 2x2 with Bluetooth 4.0 Combo; <sup>8,26</sup> Intel 802.11 a/b/g/n 2x2 with Bluetooth v2.1 (on Linux operating system) <sup>8,26</sup>
Communications	Realtek 10/100/1000 Ethernet Controller
Ports and Connectors	2 USB 3.0 ports, 2 USB 2.0 ports, 1 HDMI 1.4a, <sup>12</sup> 1 VGA, 1 stereo microphone input, 1 headphone/line out, 1 RJ—45 (Ethernet), 1 power connector
Expansion Slots	Multi Media Reader Slot supporting SD, SDHC, SDXC, Memory Stick, MSXC
Input Device	Full—sized, spill—resistant keyboard, touchpad with scroll zone and gestures support, power button, 2 launch buttons (Wireless on/off and speaker mute), Function Keys , full separate numeric keypad
Software (Windows OS only)	Buy Office, HP Wireless Hotspot, <sup>22</sup> Cyberlink Media Suite, HP ePrint <sup>23</sup> , HP Hotkey support, HP 3D DriveGuard, , PDF Complete Corporate Edition, Skype—ready <sup>13</sup> , HP Recovery Manager, Evernote, HP Support Assistant, Intel Wireless Display <sup>25</sup>
Security	Standard: HP Client Security, Microsoft Security Essentials(Win 7)/Microsoft Denfender(Win 8), HP BIOS Protection, Security Lock slot. HP Drive Encryption Optional: Intel® Anti—Theft (requires a Computrace subscription), <sup>14,8</sup> Intel®Identity Protection, <sup>8,24</sup> HP Fingerprint reader <sup>8</sup>
Dimensions (w x d x h)	14.76 x 10.09 x 0.9 in(at front) — 37.5 x 25.62 x 2.28 cm (at front)
Weight	Starting at 5.00 lb (2.29kg) without optical drive(Weight will vary by configuration.) Starting at 5.28 lb (2.40 kg) with optical drive(Weight will vary by configuration.)
Power	9—cell (93 WHr) Lithium—Ion battery; 6—cell (47 WHr) Lithium—Ion battery; Fast Charge <sup>15</sup> ; 90W Smart AC Adapter; 65W Smart AC Adapter
<b>Expansion Solutions</b>	Optional: HP 3005pr USB 3.0 Port Replicator, <sup>8</sup> HP 2005pr USB 2.0 Port Replicator <sup>8</sup>
Warranty	Limited 3 year, 1 year and 90 day warranty options available, depending on country, 1 year limited warranty on primary battery. Optional HP Care Pack Services <sup>8,16</sup> are extended service contracts which go beyond your standard warranties. For more details visit: http://www.hp.com/go/cpc.

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1. Not all features are available in all editions of Windows 8. Systems may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows 8 functionality. See http://www.microsoft.com for details.

2. This system is preinstalled with Windows®7 Pro software and also comes with a license and media for Windows 8 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. This system may require upgraded and/or separately purchased hardware to take full advantage of Windows 7 functionality. Not all features are available in all editions of Windows 7. See http://www.microsoft.com/windows/windows-7/ for details.

4. 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 on Intel®architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel®64 architecture. Processors will not operate (including 32-bit operation) without an Intel®64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Intel's numbering is not a measurement of higher performance.

5. Dual Channel is only supported when the system is configured with DDR2 symmetric memory (i.e. 2x256).

6. Maximum memory capacities require Windows 64-bit operating systems or Linux. With Windows 32-bit operating systems, memory above 3 GB may not all be available due to system resource requirements.

7. For hard drives, GB = 1 billion bytes. Actual formatted capacity is less. Up to 16 GB (for Windows 7) and 36 GB (for Windows 8) of system disk is reserved for the system recovery software.

8. Sold separately or as an optional feature.

9. HD content required to view HD images.

10. Wireless use requires separately purchased service contract. Check with your local vendor for coverage area and availability in your area. Connection and speeds will vary due to location, environment, network conditions, and other factors.

11. 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. With 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).

12. HDMI cable sold separately.

13. Skype Ready. Skype is not offered in China.

14 Intel®Anti-Theft security requires a separately purchased Absolute Computrace service subscription and must be activated and configured. Check with Absolute for availability in your country. Intel and HP assume no liability for lost or stolen data and/or systems or any other damages resulting therefrom. See http://www.intel.com/technology/anti-theft/.

15. Fast Charge Technology recharges your battery up to 90% within 90 minutes when the system is off. Fast Charge Technology does not apply to the 9-cell battery. When the PC is powered on, charge time may increase and will vary based on the workload of the notebook PC.

16. 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 <u>www.hp.com/go/cpc</u>.

Blu-ray is a format containing technologies, 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 an HDMI digital connection and your display may require HDCP support. HD-DVD disks cannot be played on this drive. Note that DVD-RAM cannot read or write to 2.6GB Single Sided/5.2 GB Double Sided – Version 1.0 media. Actual speeds may vary. Don't copy copyright-protected materials. Double Layer discs can store more data than single layer discs; discs burned with this drive may not be compatible with many existing single-layer DVD drives and players.
HP Tools partition with an HP BIOS required for automatic recovery. Business Desktops do not support this HP BIOS Protection auto-recovery feature.

19. Requires Internet Explorer. Not all websites and applications may be supported.

20 4G LTE not available in all regions and only available on products featuring Intel processors.

21. Broadband is optional and use requires separately purchased service contract. Check with service provider for coverage and availability in your area.

22. The wireless hotspot application requires an active internet connection and separately purchased data plan. While HP wireless hotspot is active, ondevice 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 for plan details. Requires Windows.

23. 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 hpconnected.com). Mobile devices require Internet connection and email capability. May require wireless access point. Separately purchased data plans or usage fees may apply. Print times and connection speeds may vary. Some HP LaserJet printers may require firmware upgrades.

24. Intel®IPT security requires separate Symantec VIP software service subscription and must be activated and configured. Requires a website that uses Symantec VIP Authentication Service. Requires Microsoft®Windows and a system with vPro or any Ultrabook. Intel®and HP assume no liability for lost or stolen data and/or systems or any other damages resulting therefrom.

25. Integrated Intel Wi-Di feature is available on select configurations only and requires separately purchased projector, tv or computer monitor with an integrated or external Wi-Di receiver. External Wi-Di receivers connect to the projector, tv or computer monitor via a standard HDMI cable, also sold separately.

26. Wireless access point and internet access required and sold separately. Availability of public wireless access points is limited.

27. Planned to be available June 2013.

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