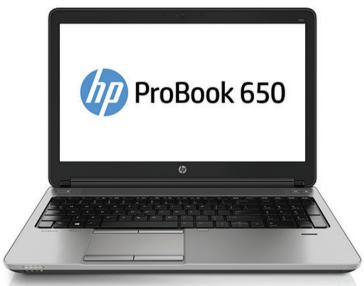
# HP ProBook 650 G1 Notebook PC



Take on tasks in the office or on the road with a durable HP ProBook 640 and HP ProBook 650. These ProBooks are thin, light and packed with productivity features to make work faster and easier. Plus, reliable security solutions keep your data out of the wrong hands.



# **HP** recommends Windows.

#### Thinner, tougher taskmaster.

Get the technology you trust from HP, with cutting-edge style that looks and feels the way you want. Join forces with the latest generation technology and legacy features your business demands on a new thinner HP ProBook for in the office or on the go.

Protect existing IT investments with support for existing legacy features such as an optical drive, optional serial ports, VGA and RJ45 connectors.

Enjoy a desktop experience on your ProBook with various docking options including HP 120W Advanced Docking Station and HP 90W Docking Station. $^{2}$ 

#### Design your ideal ProBook.

Take advantage of the wide range of features and configurable options on the new HP ProBook 600 Series. Configure a ProBook made for your business thanks to flexible architecture configurations including the latest Intel® 4th generation processors.<sup>3</sup>

Experience great visual performance with full-HD display options, AMD 1GDDR5 discrete graphics and native DisplayPort 1.2.4

Bridge distances on the HP ProBook 600 series, optimized for communication with Microsoft Lync, 5 premium audio/video and full-HD display.6

Stay in touch from the office or on the road with powerful connectivity options including 4G WWAN,  $^{7.8}$  HP Wireless Hotspot $^9$  and Bluetooth $^9$  4.0.

#### **Convenient Control.**

Protect data, devices and identities with HP Client Security<sup>10</sup> and use HP Trust Circles<sup>11</sup> to make sure only assigned contacts can access critical files.

Keep sensitive information in safe hands. HP Trust Circles<sup>11</sup> protects your data by ensuring that only approved contacts can access critical files.

Stay up and running. HP BIOS Protection<sup>12</sup> offers enhanced protection against virus attacks to the BIOS and other security threats, and is designed to help prevent data loss and reduce downtime.

Enjoy easy and simple integration into your IT environment with HP Client Management Solutions<sup>13</sup> such as optional LANDesk<sup>14</sup> and Intel vPro<sup>15</sup> technology.

Maintain a productive system environment with stable and consistent images, managed lifecycle transitions and Global Series support you can rely on.

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Operating System	Windows 8 Pro 64 Windows 7 Professional 32 (available through downgrade rights from Windows 8 Pro 64) Windows 7 Professional 64 (available through downgrade rights from Windows 8 Pro 64) Windows 7 Professional 32 Windows 7 Professional 64 Windows 7 Home Premium 32 Windows 7 Home Premium 64 FreeDOS
Processor Family	Intel® Core™ i7 processor; Intel® Core™ i5 processor; Intel® Core™ i3 processor
Processor	Intel® Core™ i3-4000M with Intel HD Graphics 4600 (2.4 GHz, 3 MB cache, 2 cores); Intel® Core™ i5-4200M with Intel HD Graphics 4600 (2.5 GHz, 3 MB cache, 2 cores); Intel® Core™ i5-4300M with Intel HD Graphics 4600 (2.6 GHz, 3 MB cache, 2 cores); Intel® Core™ i7-4600M with Intel HD Graphics 4600 (2.9 GHz, 4 MB cache, 2 cores)
Chipset	Mobile Intel® HM87; Mobile Intel® QM87
Memory	Up to 8 GB 1600 MHz DDR3 SDRAM Memory slots: 2 SODIMM
Internal Storage	320 GB up to 500 GB SATA (7200 rpm) up to 500 GB SATA SED (7200 rpm) 128 GB up to SATA SSD
Upgrade Bay	DVD+/-RW SuperMulti DL; DVD-ROM
Display	39,6 cm (15.6") diagonal LED-backlit HD anti-glare eDP 1.2 flat (1366 x 768); 39,6 cm (15.6") diagonal LED-backlit FHD SVA anti-glare eDP 1.2 slim (1920 x 1080)
Graphics	Integrated: Intel® HD Graphics 4600; Discrete: AMD Radeon HD 8750M (1 GB GDDR5 dedicated)
Audio/Visual	HD Audio with DTS Studio Sound; (2) Integrated stereo speakers; Integrated microphone (dual-microphone array with optional webcam); Stereo headphone/line out; Stereo microphone in
Wireless Support	Atheros 802.11b/g/n (1x1); Broadcom 802.11a/b/g/n (2x2) and Bluetooth 4.0 Combo; HP hs3110 HSPA+ Mobile Broadband; HP lt4112 LTE/HSPA+ Mobile Broadband; Intel Centrino Advanced-N 6235 802.11a/b/g/n and Bluetooth 4.0 Combo
Communications	Realtek (10/100/1000)
Expansion Slots	1 Media Card Reader
Input Device	Spill-resistant keyboard with drain Touchpad with on/off button, two-way scroll, gestures, two pick buttons; Pointstick with two additional pointstick buttons 720p HD webcam (select models)
Software	HP 3D DriveGuard; HP Connection Manager (Windows 7); HP Wireless HotSpot; HP Mobile Connect (EMEA only); HP PageLift; HP Recovery Manager; HP Support Assistant; HP ePrint; Buy Office
Security	HP Client Security Suite includes: HP Credential Manager, HP Password Manager, HP File Sanitizer and HP Device Access Manager with Just in Time Authentication; HP Drive Encryption; HP Secure Erase; HP Trust Circles; Microsoft Security Essentials (Windows 7) & Microsoft Defender (Windows 8); HP SpareKey; Absolute Data Protect; TPM Embedded Security Chip 1.2 Security lock
Dimensions	37.8 x 25.7 x 2.53 cm (at front)
Weight	Starting at 2.32 kg
Energy Efficiency Compliance	ENERGY STAR® qualified configurations available
Environmental Specifications	Low halogen
Power	Integrated: 65W Smart AC adapter; 90W Smart AC adapter; Discrete: 90W Smart AC adapter
Battery Type	6-cell (55 WHr) Li-Ion; 6-cell (55 WHr) Long Life
Warranty	1-year limited warranty for carry-in service (pick-up and return service in selected countries) (upgrades available, sold separately), 1-year warranty on primary battery

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# Accessories and services (not included)

HP 2012 120W Advanced Docking Station

HP offers a full line of docking stations designed exclusively for select HP Business Notebook platforms so you can maintain the connectivity and comfort of your laptop at a fixed station.

Product number: A7E36AA



HP 65W Smart Travel AC Adapter



AC power adapters from HP power your notebook and charge the internal battery simultaneously. These adapters provide you with the ability to power your notebook when away from the office or on the road. The HP 65W Slim Travel Adapter is perfect for international travelers or "road warriors" who are always on the go. The adapter is 40% thinner than the standard 65W adapter and includes a convenient USB port for charging other accessories while you work. Four international adapter plugs help make sure your Slim Travel Adapter works wherever you do. A stylish protective carrying case keeps everything together.

**Product number: AU155AA** 

HP Comfort Grip Wireless Mouse



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 Professional Slim Top Load Case



HP Professional Slim Top Load Case lets you store folders and other documents, and features storage areas for business cards, PDAs, cell phones, pens, an AC adapter and any additional items needed for a long stay away from the office or home. Designed for ultra-mobile professionals who are on the road frequently and for long periods of time.

Product number: H4J91AA

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: U4391E



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www.hp.eu/hpoptions

#### **Datasheet**

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### **Footnotes**

¹ Optional Serial ports available on HP ProBook 650.; ² Docking Stations sold separately,; ³ 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;, ⁴ Support for external displays as a standard feature through integrated processor-based graphics is dependent upon the particular PC platform/form factor; the actual number of displays supported will vary. An optional discrete graphics solution will be required for the support of additional displays. Additional cables required. DisplayPort with multi-stream through integrated graphics is planned to be available in fall 2013 as an integrated feature and as a web update in late summer 2013.; Microsoft Lync sold separately, ° Optional webcam and internet service requires through integrated graphics is planned to be available in a vailable on all products, in all regions and only available on products featuring Intel processors; Mobile Broadband is optional or an add on feature and use requires separately purchased service contract. Check with your service provider for coverage and availablity in your area. Connection speeds will vary due to location, environment, network conditions, and other factors, ° The wireless hotspot application requires an active internet connection and separately purchased 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 HP Tient Circles with up to 5 contacts in each Trust Circle. Option

#### Learn more at

www.hp.eu/notebooks

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