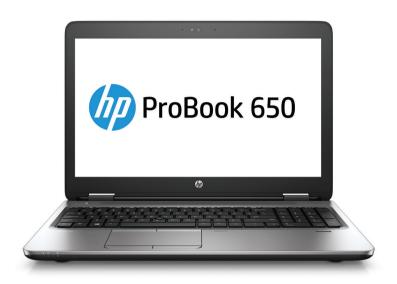
HP ProBook 650 G2 Notebook PC



Feature rich and performance ready

Equip your workforce with HP's most configurable and cost effective notebook PC. Confidently deploy the HP ProBook 650 which combines support for legacy features that provide long-term stability with modern security for today's business.



- Windows 10 Pro
- Screen Size: 39,6 cm (15.6") diagonal

Easy integration

• Help get the most out of existing IT investments with the HP ProBook 650. Take advantage of legacy features like a standard VGA port, an RJ-45 connection, an optional optical drive, and a native serial port.

Powerful processing and drive options

Select from powerful 6th Gen Intel® Core™ processors³ and integrated Intel® HD UMA graphics along with other configurable
options that let businesses configure the right ProBook 650 for each user's needs.

Professional-grade

 Create a full featured experience with powerful processors, robust DDR4 memory, and professional-grade peripheral devices like HP Pro Displays and an HP Ultraslim dock.²

Executive-class collaboration

Interact naturally with your PC using an optional FHD Touch screen and Cortana⁴ on Windows 10 Pro.¹ Enjoy impressive
collaboration tools like Skype for Business,⁵ HP Noise Reduction Software, and a 720p webcam for collaboration on the go.

Featuring

- Be productive in any situation. Experience the new features of Windows 10 Pro¹ on the powerful, touch² optional HP ProBook 650 with AMD Radeon™ discrete graphics 2GB-GDDR5.²
- The hardware BIOS design inspects the integrity of the BIOS code during each boot verifying the code ensuring only HP approved
 code executes.
- $\bullet \ \ \text{Help suppress ambient noise including keyboard clicks with HP Noise Reduction Software.}$
- Help make good speakers sound great with the HP Clear Sound Amp.
- DTS Studio Sound™ lets you make the most of virtual conferencing.
- Help protect your ProBook with a spill-resistant HP Premium Keyboard with backlit² options available.
- Get the same HP configuration across the globe, available in more than 180 countries where HP conducts business.
- Avoid surprises by tracking device health and security policy enforcement. With the HP Touchpoint Manager app, IT can quickly
 address risks to keep devices functional, and employees productive.⁶

HP ProBook 650 G2 Notebook PC Specifications Table







Available Operating System	Windows 10 Pro 64 ¹ Windows 7 Professional 64 (available through downgrade rights from Windows 10 Pro 64) ² Windows 7 Professional 32 (available through downgrade rights from Windows 10 Pro 64) ² Windows 10 Home 64 ¹ Windows 10 Home Single Language 64 ¹ Windows 8.1 Pro 64 ²³ Windows 8.1 64 ²³ Windows 7 Professional 64 ²³ Windows 7 Professional 32 ²³ FreeDoS 2.0 NeoKylin Linux
Processor Family ³	Intel® Core™ i7 processor; Intel® Core™ i5 processor; Intel® Core™ i3 processor
Available Processors ^{3,4,22}	Intel® Core™ i7-6820HQ with Intel HD Graphics 530 (2.7 GHz, up to 3.6 GHz with Intel Turbo Boost Technology, 8 MB cache, 4 cores); Intel® Core™ i7-6600U with Intel HD Graphics 520 (2.6 GHz, up to 3.4 GHz with Intel Turbo Boost Technology, 4 MB cache, 2 cores); Intel® Core™ i5-6440HQ with Intel HD Graphics 530 (2.6 GHz, up to 3.5 GHz with Intel Turbo Boost Technology, 6 MB cache, 4 cores); Intel® Core™ i5-6300U with Intel HD Graphics 520 (2.4 GHz, up to 3 GHz with Intel Turbo Boost Technology, 3 MB cache, 2 cores); Intel® Core™ i3-6100U with Intel HD Graphics 520 (2.3 GHz, up to 2.8 GHz with Intel Turbo Boost Technology, 3 MB cache, 2 cores); Intel® Core™ i3-6100U with Intel HD Graphics 520 (2.3 GHz, a MB cache, 2 cores)
Chipset	Chipset is integrated with processor
Maximum Memory	Up to 16 GB DDR4-2133 SDRAM ⁵ Standard memory note: Transfer rates up to 2133 MT/s. Both slots are customer accessible/upgradeable. Supports dual channel memory.
Memory Slots	2 SODIMM
Internal Storage	up to 1 TB SATA (5400 rpm) ⁶ up to 500 GB SATA (7200 rpm) ⁶ up to 500 GB SATA SED (7200 rpm) ⁶ up to 500 GB SATA SED (7200 rpm) ⁶ up to 500 GB SATA FIPS 140-2 SED (7200 rpm) ⁶ up to 500 GB SATA SSHD ⁶ 128 GB up to 512 GB SATA TLC SSD ⁶ 180 GB up to 512 GB SATA MLC SSD ⁶ up to 256 GB N.2 PCIe SSD ⁶
Optical Storage	Blu-ray ROM DVD+/-RW SuperMulti DL; DVD+/-RW SuperMulti DL; DVD-ROM ⁷ (Option of no optical drive.)
Display	39,6 cm (15.6°) diagonal HD SVA anti-glare slim LED-backlit (1366 x 768); 39,6 cm (15.6°) diagonal FHD SVA anti-glare slim LED-backlit (1920 x 1080); 39,6 cm (15.6°) diagonal FHD SVA slim LED-backlit touch screen (1920 x 1080) ¹²
Available Graphics	Integrated: Intel® HD Graphics 520; Intel® HD Graphics 530 Discrete: AMD Radeon™ R7 M365X (2 GB GDDR5 dedicated) (Discrete graphics available in Feb 2016.)
Audio	HD audio with DTS Studio Sound™; two integrated stereo speakers; Dual array microphones; Headphone and microphone combo jack¹²
Wireless Technologies	HP tk4120 Qualcomm® Snapdragon™ X5 LTE Mobile Broadband Module; HP hs3110 HSPA+ Mobile Broadband; Intel® 802.11a/b/g/n/ac (2x2) and Bluetooth® 4.2 Combo; Intel® 802.11a/b/g/n (2x2) and Bluetooth® 4.2 Combo; Broadcom 802.11a/b/g/n (2x2) and Bluetooth® 4.0 Combo; Broadcom 802.11b/g/n (1x1) WiFi and Bluetooth® 4.0 Combo; Realtek 802.11b/g/n (1x1) Wi-Fi; Near Field Communication (NFC) module (optional); Intel® Pro Wireless Display (WiDi Pro) ^{8,9,10,11} (Support for Miracast (Windows 8.1 and Windows 10))
Communications	Intel® Ethernet Connection I219-V; Intel® Ethernet Connection I219-LM
Expansion Slots	1 media card reader (Supports SD, SDHC, SDXC.)
Ports and Connectors	1 USB 3.0; 1 USB 3.0 charging; 1 USB Type-C™; 1 DisplayPort; 1 VGA; 1 headphone/microphone combo; 1 AC power; 1 RJ-45; 1 docking connector; 1 serial (optional)
Input Device	HP Premium Spill-Resistant Keyboard; HP Premium Spill-Resistant Backlit Keyboard (optional); HP Premium Spill-Resistant Backlit Keyboard and Dual Point (optional) Touchpad with on/off button, supports 2-way scroll, taps and gestures enabled by default, two-finger scrolling, two finger zoom (pinch)
Webcam	720p HD webcam (optional) ¹²
Available Software	HP Client Security; HP BIOSphere; HP Client Management Solutions; HP Touchpoint Manager; HP ePrint Driver; HP Mobile Connect Pro; HP Noise Reduction Software; HP Support Assistant 13,14,15,16,17,18,19
Security Management	HP Client Security; HP BIOSphere; Optional Self-Encrypting or FIPS Certified Storage Drives; Security lock slot (lock must be purchased separately); TPM 1.2; Integrated smart card reader (active); Preboot Authentication (password, Smart Card); HP Fingerprint reader (optional) ²⁰
Power	45 W Smart AC adapter; 65 W Smart AC adapter; 90 W Smart AC adapter HP Long Life 3-cell, 48 WHr Li-ion prismatic
Dimensions	37.8 x 25.7 x 2.74 cm
Weight	Starting at 2.31 kg (Weight will vary by configuration.)
Environmental	Low halogen ²¹
Energy Efficiency Compliance	ENERGY STAR® certified configurations available
Warranty	1 year standard parts and labour limited warranty, depending on country (upgrades available), 1 year limited warranty on primary battery

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Accessories and services (not included)

HP Docking Station Cable Lock



The HP Docking Station Cable Lock is dramatically simpler to use than previous locks and delivers enhanced security. The HP Docking Station Cable Lock gives you two locking options: lock the docking station only (which also prevents access to the advanced docking stations drive bay) or lock both the docking station and the notebook.

Product number: AU656AA

HP UltraSlim Docking Station



Designed exclusively for ultraslim HP EliteBook Notebook PCs, the HP UltraSlim Docking Station expands display, network, and device connectivity so you can be more productive throughout the day—all through a simple one-click slide-in side dock.

Product number: D9Y32AA

HP External USB DVDRW Drive



Connect the HP External USB DVD/RW to any available USB port on your PC¹ to get immediate read/write access to your optical media.

Product number: F2B56AA

HP 65W Smart AC Adapter



Feed your notebook with controlled servings of electricity. HP's new 65W Smart AC Adapter regulates power and offsets electrical spikes, is designed to reduce cable stress, and includes a special dongle to support current and prior HP models — perfect for replacing your notebook's power adapter or as a needed back-up.

Product number: H6Y89AA

HP 15.6 Executive Brown Top Load



Protect your bag's contents while you're on the move with the brown HP Executive Top Load, which has a lockable, double-teeth zippered notebook compartment, secure RFID pocket to safeguard your ID, and a discrete pocket for the optional HP TrackR Device.¹

Product number: P6N19AA

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 3 year Next business day Onsite Notebook Only Service



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

Learn more at

www.hp.eu/hpoptions

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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.microsoft.com.

² Sold separately or as an optional feature.

- ³ Multitore 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.
- Cortana experience may vary by device, region and requires Window 10, Apps sold separately.
- ⁵ Skype for business subscription required.
- 6 HP Touchpoint Manager requires purchase of a subscription and supports Android[™], iOS and Windows 7 or higher operating systems and PCs, notebooks, tablets and smartphones from various manufacturers. Not available in all countries see www.hp.com/touchpoint for availability information

Technical specifications disclaimers

- 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.microsoft.com.

 2 This system is preinstalled with Windows 7 Professional software and also comes with a license and media for Windows 10 Por 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 operating systems to avoid loss of your data.

 3 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
- ⁴ Some vPro[™] functionality, such as Intel[®] Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel vPro technology is dependent on 3rd party software providers. Microsoft Windows required.
- Maximum memory capacities assume Windows 64-bit operating systems. With Windows 32-bit operating systems, memory above 3 GB may not all be available due to system resource requirements.
- ⁶ For storage drives, GB = 1 billion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 7, 8 and 10) is reserved for system recovery software.
- 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 the DPD support, In ID-DVD movies cannot be played on this PC.

 8 802.11 wireless is an optional feature. Wireless access point and Internet service is required and is not included. Availability of public wireless access points limited. ay arise, and do not constitute defects in the product. Flawless playback on all systems is not
- 9 WWAN is an optional feature and 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.

 10 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.
- 11 Intel WiDi Pro support requires Intel vPro processor, Intel Graphics, and Intel 2x2 ac WLAN
- ¹² HD content required to view HD images.
- ¹³ HP Client Security requires Windows. Self Encrypting HDs (SEDs) are not supported if the encryption pin is enabled by the user ¹⁴ HP BiOSphere features may vary depending on the PC platform & configuration.

- 15 HP Client Management Solutions are sold separately.

 16 HP Touchpoint Manager requires purchase of a subscription and supports Android™, iOS and Windows 7 or higher operating systems and PCs, notebooks, tablets and smartphones from various manufacturers. Not available in all countries see ww.hp.com/touchpoint for availability information.
- 17 HP ePrint Driver 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/businessmobileprinting).
- 18 HP Mobile Connect Pro local country plans are available in UK, Ireland, Belgium, Netherlands, Luxembourg and Fearless Roaming plans are available in Germany, France, Spain and Poland. Please visit http://www.hp.com/go/mobileconnect.
- ⁰ This product ships with TPM 1.2 with option to upgrade to TPM 2.0. Upgrade utility is expected to be available by the end of 2015 via HP Customer Support
- 21 External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.

 22 Intel® Core™17-6820HQ and Intel® Core™15-6440HQ available Feb 2016
- 23 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. See http://www.microsoft.com

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