

# HP ProBook 650 G4 Notebook PC



## The flexible PC for demanding business

The all new modern slim design of the HP ProBook 650 delivers enterprise-grade performance, security, and manageability while working with today's technology and continuing to support connectivity to legacy devices.



## HP recommends Windows 10 Pro.

### Updated slim design

- The precision-crafted slim chassis in a modern natural silver finish is designed to pass MIL-STD 810G testing<sup>2</sup> and supports several HP docking options<sup>3</sup> for gradual transitions to modern docking solutions.

### High performance

- Help speed up demanding business applications with an optional 8th Gen quad-core Intel® Core™ processor<sup>4</sup> and discrete graphics.

### Built on a secure foundation

- Protect your PC against the evolving malware threats of the future, with self-healing, hardware-enforced, and manageable security solutions from HP. From the BIOS to the browser HP Sure Start Gen4<sup>5</sup> and HP Sure Click<sup>6</sup> help secure your PC.

### Featuring

- Power through your day with Windows 10 Pro<sup>1</sup> and the powerful security, collaboration and connectivity features from HP.
- Take on demanding graphics and video tasks using high resolution 4k displays with optional AMD Radeon™ RX540 Discrete Graphics<sup>7</sup>.
- Never wonder if someone is watching you with the added peace-of-mind that comes from the integrated HP Privacy Camera<sup>8</sup>, with a physical shutter to protect from malicious surveillance.
- Protect your PC with the hardware-enforced self-healing protection of HP Sure Start Gen4<sup>5</sup> that automatically recovers the BIOS.
- Help protect your PC from websites and in-browser .pdf files infected with malware, ransomware, or viruses with HP Sure Click<sup>6</sup>.
- Fortify your security with up to three authentication factors including passwords and optional fingerprint recognition<sup>9</sup>.
- The HP Manageability Integration Kit Gen2<sup>10</sup> helps speed up image creation and management of hardware, BIOS, and security through Microsoft System Center Configuration Manager.
- Stand up to the workload with a ProBook that is designed to pass MIL-STD 810G testing<sup>2</sup>.

# HP ProBook 650 G4 Notebook PC

## Specifications Table

HP recommends Windows 10 Pro.



Available Operating System	Windows 10 Pro 64 – HP recommends Windows 10 Pro. <sup>1</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 (i7-8650U); 8th Generation Intel® Core™ i7 processor (i7-8550U); 8th Generation Intel® Core™ i5 processor (i5-8350U); 8th Generation Intel® Core™ i5 processor (i5-8250U); 8th Generation Intel® Core™ i3 processor (i3-8130U); 7th Generation Intel® Core™ i5 processor (i5-7300U); 7th Generation Intel® Core™ i5 processor (i5-7200U)
Available Processors <sup>3,4,5</sup>	Intel® Core™ i7-8650U vPro™ processor with Intel® UHD graphics 620 (1.9 GHz base frequency, up to 4.2 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 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™ i5-8350U vPro™ processor with Intel® UHD Graphics 620 (1.7 GHz base frequency, up to 3.6 GHz with Intel® Turbo Boost Technology, 6 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™ i5-7300U vPro™ processor with Intel® HD Graphics 620 (2.6 GHz base frequency, up to 3.5 GHz with Intel® Turbo Boost Technology, 3 MB cache, 2 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™ i3-8130U with Intel® UHD graphics 620 (2.2 GHz base frequency, up to 3.4 GHz with Intel® Turbo Boost Technology, 4 MB cache, 2 cores)
Maximum Memory	Up to 32 GB DDR4-2400 SDRAM <sup>6</sup> Standard memory note: Transfer rates up to 2400 MT/s. Both slots are customer accessible/upgradeable. Supports dual channel memory.
Memory Slots	2 SODIMM
Internal Storage	500 GB up to 1 TB 7200 rpm SATA <sup>7</sup> 256 GB up to 1 TB PCIe® NVMe™ M.2 SSD <sup>7</sup> 128 GB up to 512 GB PCIe® M.2 SSD <sup>7</sup>
Optical Storage	DVD-Writer
Display	39.6 cm (15.6") diagonal FHD IPS eDP LED-backlit touch screen, 220 cd/m <sup>2</sup> , 45% sRGB (1920 x 1080); 39.6 cm (15.6") diagonal FHD IPS eDP anti-glare LED-backlit, 220 cd/m <sup>2</sup> , 45% sRGB (1920 x 1080); 39.6 cm (15.6") diagonal HD SVA eDP anti-glare LED-backlit, 220 cd/m <sup>2</sup> , 45% sRGB (1366 x 768) <sup>11,13,15,16</sup>
Available Graphics	Integrated: Intel® UHD Graphics 620; Intel® HD Graphics 620 <sup>11</sup> Discrete: AMD Radeon™ RX 540 (2 GB GDDR5 dedicated) <sup>12</sup>
Wireless Technologies	HP It4132 LTE/HSPA+ Mobile Broadband Module; Intel® Dual Band Wireless-AC 8265 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 4.2 Combo, non-vPro™; Realtek 802.11ac (2x2) Wi-Fi® and Bluetooth® 4.2 Combo; Intel® Dual Band Wireless-AC 8265 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 4.2 Combo, vPro™; Intel® XMM™ 7360 LTE-Advanced; Realtek 802.11ac (1x1) Wi-Fi® and Bluetooth® 4.2 Combo <sup>9,9</sup>
Communications	HP Module with NXP NFC Controller NPC300 I2C NCI; Intel® I219-LM GbE, vPro™; Intel® I219-V GbE, non-vPro™ <sup>10</sup>
Expansion Slots	1 microSD
Ports and Connectors	1 USB 3.1 Type-C™ (charging); 3 USB 3.1 Gen 1 (1 charging); 1 HDMI 1.4; 1 RJ-45; 1 VGA; 1 headphone/microphone combo; 1 AC power; 1 docking connector (Cables are not included.)
Input Device	HP Advanced Keyboard, Spill-resistant with drain, optional DuraKeys and backlit Clickpad with multi-touch gesture support, taps enabled as default
Webcam	720p HD camera <sup>11,13,14</sup>
Available Software	Native Miracast support; HP LAN Protection; HP Velocity; HP ePrint Driver + JetAdvantage; HP Hotkey Support; HP Recovery Manager; HP JumpStart; HP Support Assistant; HP Noise Cancellation Software; HP PhoneWise; HP 3D DriveGuard; HP MAC Address Manager; Buy Office <sup>17,18,19,20</sup>
Security Management	HP BIOSphere Gen4; HP DriveLock and Automatic DriveLock; Power-on authentication; HP Secure Erase; Absolute persistence module; Preboot authentication; HP Wireless Wakeup; HP Client Security Gen4; HP Password Manager; HP Fingerprint Reader; Microsoft Security Defender; TPM 2.0 embedded security chip shipped with Windows 10 (Common Criteria EAL4+ Certified); RAID configurations; HP Sure Click; HP SureStart Gen4 <sup>24,25,26,27,28,29,30,31,32</sup>
Power	HP Smart 65 W External AC power adapter; HP Smart 45 W External AC power adapter <sup>34</sup> HP Long Life 3-cell, 48 Wh Li-ion Up to 13 hours <sup>33</sup> (Battery is internal and not replaceable by customer. Serviceable by warranty.)
Dimensions	37.7 x 25.7 x 2.39 cm
Weight	Starting at 2.18 kg (Weight will vary by configuration.)
Energy Efficiency Compliance	ENERGY STAR® certified and EPEAT® Gold registered configurations available
Warranty	1 year standard parts and labor limited warranty (1-1-0), depending on country (upgrades available). 1 year limited warranty on primary battery.

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### Accessories and services (not included)

HP Exec 15.6 Midnight Top Load



Keep everything in your bag safe during your daily commute with the HP Executive 15.6 Midnight Top Load in a new stylish midnight black.  
**Product number: 1KM15AA**

HP External USB DVDRW Drive



Connect the HP External USB DVD/RW to any available USB port on your PC<sup>1</sup> 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 Keyed Cable Lock 10 mm



Help keep your notebook safe in the office and high-traffic areas by tethering it to a secure surface with the HP Master Keyed Cable Lock 10mm, designed specifically for ultra-thin profile notebooks.  
**Product number: T1A62AA**

HP Wireless Collaboration Keyboard



Make your Skype for Business<sup>®</sup> voice and video calls<sup>1</sup> easier than ever and declutter your workspace with the elegant HP Wireless Collaboration Keyboard, redesigned for enhanced every day and collaborative productivity.  
**Product number: Z9N39AA**

HP 3 year Next Business Day Onsite Hardware Support for Notebooks

Receive 3 years of next business day onsite HW support from an HP-qualified technician for your computing device, if the issue cannot be solved remotely.  
**Product number: U4391E**



## Messaging 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 and/or software 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> 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. Damage under the MIL STD test conditions or any accidental damage requires an optional HP Accidental Damage Protection Care Pack.

<sup>3</sup> Sold separately or as an optional feature.

<sup>4</sup> Intel® Quad Core™ processors are optional. 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, branding and/or naming is not a measurement of higher performance.

<sup>5</sup> HP Sure Start Gen4 is available on HP ProBook products equipped with Intel® or AMD 8th generation processors.

<sup>6</sup> HP Sure Click is available on select HP platforms and supports Microsoft® Internet Explorer and Chromium™. Check <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW> for all compatible platforms as they become available.

<sup>7</sup> Video conferencing requires internet connection and creative applications are sold separately.

<sup>8</sup> HP Privacy Camera only available on non-touch screens equipped with HD camera and must be installed at the factory.

<sup>9</sup> HP Multi Factor Authenticate requires 7th or 8th Generation Intel® Core™ processor, Intel® integrated graphics, and Intel® WLAN. Three authentication factors requires an Intel® vPro™ processor.

<sup>10</sup> HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.

## Technical specifications disclaimers

<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> 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, branding and/or naming is not a measurement of higher performance.

<sup>3</sup> Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.

<sup>4</sup> 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>.

<sup>5</sup> 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.

<sup>6</sup> 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>7</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.

<sup>8</sup> 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.

<sup>9</sup> The term "10/100/1000" or "Gigabit" Ethernet indicates compatibility with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

<sup>10</sup> HD content required to view HD images.

<sup>11</sup> AMD Dynamic Switchable Graphics technology requires an Intel processor, plus an AMD Radeon™ discrete graphics configuration and is not available on FreeDOS and Linux OS. 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).

<sup>12</sup> Sold separately or as an optional feature.

<sup>13</sup> Internet access required.

<sup>14</sup> Resolutions are dependent upon monitor capability, and resolution and color depth settings.

<sup>15</sup> 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>.

<sup>16</sup> 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](http://www.hp.com/go/eprintcenter)). Print times and connection speeds may vary.

<sup>17</sup> HP Support Assistant requires Windows and Internet access.

<sup>18</sup> HP PhoneWise Client is only available on select platforms. For supported platforms and HP PhoneWise system requirements see [www.hp.com/go/HPPhoneWise](http://www.hp.com/go/HPPhoneWise).

<sup>19</sup> HP Driver Packs not preinstalled, however available for download at <http://www.hp.com/go/clientmanagement>.

<sup>20</sup> HP Manageability Integration Kit can be downloaded from <http://www8.hp.com/us/en/ads/clientmanagement/overview.html>

<sup>21</sup> Ivanti Management Suite subscription required.

<sup>22</sup> HP BIOSphere Gen4 features may vary depending on the PC platform and configurations. Requires Intel® or AMD 8th generation processors.

<sup>23</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.

<sup>24</sup> 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 from Absolute Software.

<sup>25</sup> HP Client Security Suite Gen 4 requires Windows and Intel® or AMD 8th generation processors.

<sup>26</sup> 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.

<sup>27</sup> HP Fingerprint Sensor sold separately or as an optional feature.

<sup>28</sup> Microsoft Defender Opt in and internet connection required for updates.

<sup>29</sup> RAID configuration is optional and does require a second hard drive.

<sup>30</sup> HP Sure Click is available on select HP platforms and supports Microsoft® Internet Explorer and Chromium™. Check <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW> for all compatible platforms as they become available.

<sup>31</sup> 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](http://www.bapco.com) for additional details.

<sup>32</sup> Availability may vary by country.

<sup>33</sup> 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](http://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.

<sup>34</sup> 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](http://www.hp.com/go/options).

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