

# HP EliteBook 650 15.6 inch G10 Notebook PC Wolf Pro Security Edition (7Z5F3UT)



## Empowering the hybrid workforce

Simplify hybrid work with the cost-effective, highly secure, and easily managed HP EliteBook 650. The latest Intel® processor[2], a wide variety of configurable ports, and connectivity options allow easy adoption for use at home, in the office, or when traveling.



HP recommends Windows 11 Pro for business

### Two USB Type-C® ports

Equipped with one Thunderbolt™ 4 with USB4 Type-C®, and 1 multifunction USB Type-C® port.

### Protected by HP Wolf Security

HP Wolf Pro Security Edition PCs interlace HP Sure Click Pro with HP Sure Sense Pro providing more in-depth coverage than the standard versions through a 1-year or 3-year user license with HP Support.[3] This creates a powerful, single solution that doesn't require an IT-managed PC environment.

### Crystal-clear speakers

Enjoy the crystal-clear audio performance delivered by HP Dynamic Audio[6] and HP AI Noise Reduction.[6]

## Featuring

### Windows 11

Work anywhere without compromising on performance or security with Windows 11 powered by HP's collaboration and connectivity technology.

### Security is your top priority

The HP Wolf Pro Security Edition provides preconfigured enterprise-level PC protection for small and medium sized businesses. [1]

### Look your best, even in low light

Optimize your video calls in low lighting with an HD camera and temporal noise reduction that lowers the effects of visual noise and pixelation. [6]

### Fast and efficient wireless LAN

The portability of your PC and the reliability of a fast connection determines where you can work. Get a fast and reliable connection in dense wireless environments with gigabit-speed Wi-Fi 6. [4]

### Automatic recovery from firmware attacks

Firmware attacks can completely devastate your PC. Stay protected with HP's self-healing BIOS - HP Sure Start Gen7 automatically recovers the BIOS from malware, rootkits, or corruption.

## Specifications

<b>Operating system</b>	Windows 11 Pro <sup>[1]</sup>
<b>Product color</b>	Pike silver aluminum
<b>Processor family</b>	13th Generation Intel® Core™ i7 processor
<b>Processor</b>	Intel® Core™ i7-1355U (up to 5.0 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 10 cores, 12 threads) <sup>[6,7]</sup>
<b>Memory</b>	16 GB DDR4-3200 MHz RAM (1 x 16 GB)
<b>Memory Slots</b>	2 SODIMM
<b>Internal Storage</b>	256 GB PCIe® NVMe™ SSD
<b>Graphics</b>	Integrated
<b>Graphics (integrated)</b>	Intel® Iris® X <sup>e</sup> Graphics
<b>Display</b>	39.6 cm (15.6") diagonal, FHD (1920 x 1080), touch, IPS, narrow bezel, 250 nits, 45% NTSC
<b>Display</b>	15.6" diagonal, FHD (1920 x 1080), touch, IPS, narrow bezel, 250 nits, 45% NTSC <sup>[13,15,16,17]</sup>
<b>Display size (diagonal)</b>	39.6 cm (15.6")
<b>Display size (diagonal)</b>	15.6"
<b>Audio</b>	Dual stereo speakers, dual array microphones
<b>Minimum dimensions (W x D x H)</b>	35.94 x 23.39 x 1.99 cm
<b>Minimum dimensions (W x D x H)</b>	14.14 x 9.2 x 0.78 in
<b>Weight</b>	Starting at 1.78 kg <i>(Weight will vary by configuration. Does not include power adapter.)</i>
<b>Weight</b>	Starting at 3.94 lb <i>(Weight will vary by configuration. Does not include power adapter.)</i>
<b>Keyboard</b>	HP Premium Keyboard – spill-resistant, backlit keyboard with numeric keypad
<b>Pointing device</b>	Clickpad with multi-touch gesture support, taps enabled as default
<b>Camera</b>	720p HD camera
<b>Ports</b>	1 USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4); 2 USB Type-A 5Gbps signaling rate (1 charging); 1 AC power; 1 HDMI 2.1; 1 stereo headphone/microphone combo jack; 1 RJ-45 <i>(HDMI cable sold separately.)</i>
<b>Wireless</b>	Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card (supporting gigabit data rate)
<b>Power</b>	HP Smart 65 W External AC power adapter <sup>[37]</sup>
<b>Battery type</b>	HP Long Life 3-cell, 51 Wh Li-ion
<b>Battery weight</b>	0.40 lb
<b>Battery weight</b>	181.83 g
<b>Energy star certified</b>	ENERGY STAR® certified
<b>Management features</b>	HP Client Management Script Library (download); HP Driver Packs (download); HP Client Catalog (download); HP Manageability Integration Kit Gen4 (download); HP Image Assistant Gen5 (download); HP Patch Assistant (download); HP Cloud Recovery; HP Connect for Microsoft Endpoint Manager <sup>[22,23,24]</sup>
<b>Sustainable impact specifications</b>	Low Halogen
<b>Security management</b>	Absolute persistence module; HP Secure Erase; HP Sure Click; HP Sure Sense; BIOS Update via Network; HP Sure Admin; HP BIOSphere Gen6; HP Client Security Manager Gen7; TPM 2.0 embedded security chip (Common Criteria EAL4+ and FIPS 140-2 Level 2 Certified); HP Sure Start Gen7; HP Wake on WLAN; HP Tamper Lock; HP Sure Run Gen5; HP Sure Recover Gen5; Secured-Core PC Enable <sup>[25,26,27,28,29,30,31,32,33,34]</sup>
<b>Software included</b>	HP Connection Optimizer; HP Hotkey Support; HP Power Manager; myHP; HP Privacy Settings; HP Notifications; HP PC Hardware Diagnostics Windows; HP Services Scan; HP Smart Support (download) <sup>[20,21,38,57]</sup>
<b>UPC number</b>	(ABA) 197497104622; (ABL) 197497104639
<b>Manufacturer Warranty</b>	1-year and 3-year limited warranties and 90 day software limited warranty options depending on country. Batteries have a default one year limited warranty. Refer to <a href="http://www.hp.com/support/batterywarranty/">http://www.hp.com/support/batterywarranty/</a> for additional battery information. On-site service and extended coverage is also available. HP Care Pack Services are optional extended service contracts that go beyond the standard limited warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: <a href="http://www.hp.com/go/cpc">http://www.hp.com/go/cpc</a> .

**Top Recommended Displays, Accessories and Services**

No Top Recommended Displays, Accessories and Services

## Messaging Footnotes

[1] This product includes a one (1) year license of HP Wolf Pro Security Edition which includes HP Sure Click Pro and HP Sure Sense Pro. The HP Wolf Pro Security Edition software is licensed under the license terms of the HP End User License Agreement (EULA) that can be found at: [https://support.hp.com/us-en/document/ish\\_3875769-3873014-16](https://support.hp.com/us-en/document/ish_3875769-3873014-16) as modified by the following: "7. Term. Unless otherwise terminated earlier pursuant to the terms contained in this EULA, the license for the HP Wolf Pro Security Edition (HP Sure Sense Pro and HP Sure Click Pro) is effective upon activation and will continue for twelve (12) months thereafter ("Initial Term"). At the end of the Initial Term you may either (a) purchase a renewal license for the HP Wolf Pro Security Edition from HP.com, HP Sales or an HP Channel Partner, or (b) continue using the standard versions of HP Sure Click and HP Sure Sense at no additional cost with no future software updates or HP Support."

[2] 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. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. AMD's numbering is not a measurement of clock speed.

[3] HP Wolf Pro Security Edition (including HP Sure Click Pro and HP Sure Sense Pro) is available preloaded on select SKUs and, depending on the HP product purchased, includes a paid 1-year or 3-year license. The HP Wolf Pro Security Edition software is licensed under the license terms of the HP Wolf Security Software - End-User license Agreement (EULA) that can be found at: [https://support.hp.com/us-en/document/ish\\_3875769-3873014-16](https://support.hp.com/us-en/document/ish_3875769-3873014-16) as that EULA is modified by the following: "7. Term. Unless otherwise terminated earlier pursuant to the terms contained in this EULA, the license for the HP Wolf Pro Security Edition (HP Sure Sense Pro and HP Sure Click Pro) is effective upon activation and will continue for either a twelve (12) month or thirty-six (36) month license term ("Initial Term"). At the end of the Initial Term you may either (a) purchase a renewal license for the HP Wolf Pro Security Edition from HP.com, HP Sales or an HP Channel Partner, or (b) continue using the standard versions of HP Sure Click and HP Sure Sense at no additional cost with no future software updates or HP Support."

[4] Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 (802.11ax) are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the PC to communicate with other 802.11ax devices. Wi-Fi® supporting gigabit speeds is achievable with Wi-Fi 6 (802.11ax) when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 160MHz channels.

[6] Requires the myHP application and Windows OS.

## Technical Specifications 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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com>.

[6] 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. 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.

[7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See <http://www.intel.com/technology/turboboost/> for more information.

[13] HD content required to view HD images.

[15] Resolutions are dependent upon monitor capability, and resolution and color depth settings.

[16] HP Sure View Reflect integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.

[17] Actual brightness will be lower with touchscreen or Sure View.

[20] HP Support Assistant requires Windows and Internet access.

[21] HP Services Scan is provided with Windows Update on select products and will check entitlement on each hardware device to determine if an HP TechPulse-enabled service has been purchased, and will download applicable software automatically. HP TechPulse is a telemetry and analytics platform that provides critical data around devices and applications. For full system requirements or to disable this feature, please visit <http://www.hpdaas.com/requirements>. Not applicable in China.

[22] HP Connect for Microsoft Endpoint Manager is available from the Azure Market Place for HP Pro, Elite, Z and Point-of-Sale PCs managed with Microsoft Endpoint Manager. Subscription to Microsoft Endpoint Manager required and sold separately. Network connection required.

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

[24] HP Patch Assistant available on select HP PCs with the HP Manageability Kit that are managed through Microsoft System Center Configuration Manager. HP Manageability Integration Kit can be downloaded from <http://www8.hp.com/us/en/ads/clientmanagement/overview.html>.

[25] HP Sure Click requires Windows 10 Pro or higher or Enterprise. See [https://bit.ly/2PrLT6A\\_SureClick](https://bit.ly/2PrLT6A_SureClick) for complete details.

[26] HP Sure Sense is available on select HP PCs with Windows 10 Pro, Windows 10 Enterprise, Windows 11 Pro, or Windows 11 Enterprise OS25. HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher. HP Sure Recover Gen5 with Embedded Reimaging is an optional feature which requires Windows 10 and higher must be configured at purchase. You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Network based recovery using Wi-Fi is only available on PCs with Intel Wi-Fi Module.

[27] HP Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher.

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