Essential, commercial-grade features

The HP ProBook 450 15-inch laptop provides growing businesses with the commercial-grade performance, multi-layered endpoint security, and durability in an easily upgradeable design. Powered by the latest Intel® processor² and long battery life, this feature-rich PC is well-equipped for long-term productivity and helps enable hybrid work.

Optimized for hybrid work

Stand out no matter where you work. Enhance communications with lighting adjustments³ and optional features like Wi-Fi 6E^{4,5} and the 88-degree field-of-view 5MP camera.⁴ Easily connect accessories with two multifunction USB-C[®] ports.

Advanced security and durability

Safeguard your business with multi-layered, endpoint security features that help protect your PC from malware and hacking. This PC passes 19 MIL-STD tests⁶ for durability and is easily serviceable —helping make the most of your IT investment.

Performance for growing business

Keep up with demanding tasks on this feature-rich HP ProBook 450. Take on the workday with the latest Intel® processor^{2,4}, NVIDIA RTX2050 Discrete Graphics⁴, and long battery life. Easily upgrade memory and storage as needed.



*Product image may differ from actual product



Featuring

HP recommends Windows 11 Pro for business

Work anywhere without compromising on performance or security with Windows 11, powered by HP collaboration and connectivity technology.¹

Latest Intel® multi-core processor

Configure your HP ProBook 450's CPU for the perfect combination of power, snappy performance, and value. The latest Intel® processor handles multiple work tasks smoothly and reliably with multiple processing cores to divide up the work.²

Protected by HP Wolf Security

HP Wolf Security for Business creates a hardware-enforced, always-on, resilient defense. From the BIOS to the browser, above, in, and below the OS, these constantly evolving solutions help protect your PC from modern threats.⁷

Capture all the details

Whether on a call, recording video, or taking photos, the HD with IR or optional 5MP camera with Temporal Noise Reduction provides exceptional clarity and increased definition. Keep everyone in view with an 88-degree field of view.³

Smooth graphics performance

Boost your laptop's performance with optional NVIDIA® GeForce RTX2050 discrete graphics. Enable fast execution for your computing, multimedia, and Al workloads with enhanced, dedicated next-gen graphics.³

Wireless 4G LTE connectivity

Stay connected almost anywhere with the optional embedded CAT16 WWAN. Highly reliable advanced network connectivity helps expand connectivity and enhance security.⁸

A modern universal docking solution

Quickly transition to desktop productivity with two multi-function USB Type- C° ports. Simply connect with USB- C° cables from your laptop to your displays and other peripherals.

Protect your devices and data

Utilize the optional HP Wolf Protect and Trace service with threshold cryptography to find, lock, and erase data from all of your premium HP devices, helping ensure that your sensitive information is protected.¹⁰

Bright, crystal-clear images

Enjoy vibrant FHD images with 400 nits of brightness, adding a new dimension to digital content. Combined with a Low Blue Light panel, this screen helps provide an enhanced overall viewing experience. 3,11

Upgradeable DDR4 SO-DIMM slot

Elevate your laptop's performance with up to 32GB dual channel memory. Easily upgrade with an easy-open cover featuring self-capturing screws and maintain memory to meet the growing demands of your business. 12

A self-healing solution

Firmware attacks can completely devastate your PC. Stay protected with HP Sure Start Gen7, the self-healing BIOS that automatically recovers itself from attacks or corruption.¹³

Help keep it safe

 $Stop\ unwanted\ changes\ to\ security\ settings\ and\ help\ limit\ the\ spread\ of\ malware\ with\ HP\ Sure\ Run\ Gen5\ which\ identifies,\ quarantines,\ and\ provides\ reporting\ on\ attackers\ trying\ to\ kill\ processes.$



Technical specifications

Available Operating Systems	Windows 11 Pro Education Windows 11 Pro Education Windows 11 Pro for business Windows 11 Home – HP recommends Windows 11 Pro for business Windows 11 Home Single Language – HP recommends Windows 11 Pro for business Windows 11 Pro (Windows 11 Enterprise or Windows 10 Enterprise available with a Volume Licensing Agreement) Windows 11 Pro (preinstalled with Windows 10 Pro Downgrade) PreeDOS
Processor family ⁶	Intel® Pentium® processor 13th Generation Intel® Core™ i7 processor 13th Generation Intel® Core™ i5 processor 13th Generation Intel® Core™ i3 processor
Available Processors ^{3,4,5}	Intel® Core™ i7:1355U (1.2 GHz E-core base frequency, 1.7 GHz P-core base frequency, up to 3.7 GHz E-core Max Turbo frequency, up to 5.0 GHz P-core Max Turbo frequency, 12 MB L3 cache, 2 P-cores and 8 E-cores, 12 threads) Intel® Core™ i5:1335U (0.9 GHz E-core base frequency, 1.3 GHz P-core base frequency, up to 3.4 GHz E-core Max Turbo frequency, up to 4.6 GHz P-core Max Turbo frequency, 12 MB L3 cache, 2 P-cores and 8 E-cores, 12 threads) Intel® Core™ i3:1340P with Intel® UHD Graphics (0.9 GHz E-core base frequency, 1.2 GHz P-core base frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.5 GHz P-core Max Turbo frequency, 10 MB L3 cache, 2 P-cores and 4 E-cores, 6 threads) Intel® Pentium® U300 with Intel® UHD Graphics (0.9 GHz E-core base frequency, 12 GHz P-core base frequency, up to 3.3 GHz E-core Max Turbo frequency, up to 4.4 GHz P-core burst frequency, 8 MB L3 cache, 1 P-core and 4 E-cores, 6 threads) Intel® Core™ i7:1360P (1.6 GHz E-core base frequency, 2 GHz P-core base frequency, up to 3.7 GHz E-core Max Turbo frequency, up to 5.0 GHz P-core Max Turbo frequency, 18 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads) Intel® Core™ i5:1340P (1.4 GHz E-core base frequency, 1.9 GHz P-core base frequency, up to 3.4 GHz E-core Max Turbo frequency, up to 4.6 GHz P-core Max Turbo frequency, 12 MB L3 cache, 4 P-cores and 8 E-cores, 16 threads) Intel® Core™ i5:1334U (0.9 GHz E-core base frequency, 1.3 GHz P-core base frequency, up to 3.4 GHz E-core Max Turbo frequency, up to 4.6 GHz P-core Max Turbo frequency, 12 MB L3 cache, 4 P-cores and 8 E-cores, 12 threads)
Maximum memory	32 GB DDR4-3200 MHz RAM; (Transfer rates up to 3200 MT/s.); ⁷ Both slots are accessible/upgradeable by IT or self-maintainers only. Supports dual channel memory.
Memory slots	2 SODIMM
Internal storage	up to 1 TB PCle® NVMe™ M.2 SSD TLC ⁸ 128 GB up to 512 GB PCle® NVMe™ Value SSD ⁸
Display size (diagonal, metric)	39.6 cm (15.6")
Display	39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare, 400 nits, low power, 100% sRGB; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), narrow bezel, anti-glare, 250 nits, 45% NTSC; 39.6 cm (15.6") diagonal, FHD (1920 x 1080), touch, IPS, narrow bezel, anti-glare, 250 nits, 45% NTSC; 39.6 cm (15.6") diagonal, QHD (2560 x 1440), IPS, anti-glare, narrow bezel, 300 nits, 72% NTSC 14,15,16
Available Graphics	Integrated: Intel® UHD Graphics; Intel® Iris® X® Graphics ^{14,42} Discrete: NVIDIA® GeForce RTX™ 2050 Laptop GPU (4 GB GDDR6 dedicated) ⁴³ (Support CUDA, Optimus, PhysX, GPU Boost 2.0.)
Audio	Dual stereo speakers, dual array microphones
Wireless technologies	Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card, non-vPro®; Realtek Wi-Fi 6E RTL8852CE 802.11a/b/g/n/ax (2x2) and Bluetooth® 5.3 wireless card 9.10.11.12 (Compatible with Miracast-certified devices.) (Support on S3 AC mode only.)
Ports and connectors	2 USB Type-A 5Gbps signaling rate (1 charging, 1 power); 1 AC power; 1 HDMI 2.1; 1 stereo headphone/microphone combo jack; 1 RJ-45; 2 USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1); (HDMI cable sold separately.); Optional Ports: 1 External Nano SIM slot for WWAN ⁴¹
Input devices	$HP\ Premium\ Keyboard\ -\ spill-resistant,\ full-size,\ optional\ backlit\ keyboard\ with\ numeric\ keypad^{13},\ Clickpad\ with\ multi-touch\ gesture\ support$
Communications	Realtek RTL8111HSH-CG 10/100/1000 GbE NIC ⁴⁰ ; Intel® XMM™ 7560 LTE Advanced Pro Cat 16
Camera	720p HD camera with temporal noise reduction (select models); IR Camera (select models) ¹⁴
Software	HP Connection Optimizer; HP Hotkey Support; HP Support Assistant; HP Power Manager; myHP; HP Privacy Settings; HP Notifications; HP QuickDrop; HP PC Hardware Diagnostics Windows; HP Services Scan; HP Smart Support (download) Microsoft 365 sold separately and requires Internet access for activation. 17,18,19,38,44,45
Security management	Absolute persistence module; HP DriveLock and Automatic DriveLock; 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; Secured-Core PC Enable
Security Software Licenses	HP Wolf Pro Security Edition ⁵⁶
Fingerprint reader	Fingerprint sensor (select models)



Technical specifications	
Management features	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 Cloud Recovery ^{20,21}
Power	HP Smart 65 W EM External AC power adapter; HP Smart 45 W External AC power adapter; HP Smart 65 W USB Type-C* adapter; HP Smart 45 W USB Type-C* adapter 37
Battery type	HP Long Life 3-cell, 42 Wh Li-ion polymer; HP Long Life 3-cell, 51 Wh polymer ³⁶ ; Battery is internal and not replaceable by customer. Serviceable by warranty.
Dimensions	35.94 x 23.39 x 1.99 cm; 6.9 x 48.3 x 30.5 cm (Package)
Weight	Starting at 1.79 kg; (Weight will vary by configuration. Does not include power adapter.)
Ecolabels	CECP; IT ECO Declaration; EPEAT® Gold registered in the U.S.; SEPA; Taiwan Green Mark; Japan PC Green Label; KOECO; TCO Certified ³⁹
Energy star certified (series fixed)	ENERGY STAR® certified
Sustainable impact specifications	Low Halogen; Bulk packaging available; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; Outside box and corrugated cushions are 100% sustainably sourced and recyclable; 10% post-consumer recycled plastic ⁴⁴
Warranty	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 http://www.hp.com/support/batterywarranty/ 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: http://www.hp.com/go/cpc.



Footnotes

Key Selling Points 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.

² 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.

- ³ Requires myHP application and Windows OS.
- ⁴ Optional feature that must be configured at the time of purchase.
- ⁵ Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, and Windows 11 to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported.
- 6 MIL-STD testing 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. Accidental damage requires an optional HP Accidental Damage Protection Care Service.
- ⁷ HP Wolf Security for Business requires Windows 10 and higher, includes various HP security features and is available on HP Pro, Elite, Workstation, and RPOS products. See product details for included security features and OS requirements.
- 8 WWAN is an optional feature, requires factory configuration and separately purchased service contract. Check with service provider for coverage and availability in your area. 4G LTE not available on all products, in all regions,
- ⁹ USB-C[®] cables sold separately and not included.
- 10 HP Wolf Security Protect and Trace is and optional feature and is available for select HP 400, 600, 800, 1000, Windows based Elite Dragonfly Laptops, select 800 desktops, and Z1 G8 Workstations and will function when the device is powered on and connected to the Internet. HP TechPulse a telemetry and analytics platform that provides critical data around devices and applications and is not sold as a standalone service. HP TechPulse follows stringent GDPR privacy regulations and is ISO27001, ISO27701, ISO27701 and SOC2 Type2 certified for Information Security. Internet access with connection to TechPulse portal is required. For full system requirements, please visit http://www.hpdaas.
- ¹¹ Full high-definition (FHD) content required to view FHD images.
- 12 Dual channel memory is sold separately or as an optional feature. 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.

Feature Messaging Footnotes

- ¹³ HP Sure Start Gen7 is available on select HP PCs and requires Windows 10 and higher.
- $^{14}\,\mbox{HP}$ Sure Run Gen5 is available on select HP PCs and requires Windows 10 and higher.

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.

 2 This system is preinstalled with Windows 10 Pro software and also comes with a license for Windows 11 Pro software and provision for recovery 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 book up all data (filles) profices, etc.) before uninstalling and installing porentiag systems to avoid loss of your data.

 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® numbering. Intel® from uses of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel® numbering. Performance makes a processor speed denotes maximum performance mode: processor such to a lost the processor speed denotes maximum performance mode processors will not allowed processors speed denotes maximum performance mode: processor such that the processor speed denotes maximum performance mode: processors will not allowed processors such performance veries depending on a hardware, software and overall system configurations. Performance will not for soft processors such performance veries depending on a hardware, software and overall system or influenced that the configurations is not the performance and clock frequency will vary depending on application worklo

- The products in all regions.

 2 Gigabit dass Category 16 4G ITE module is optional and must be configured at the factory. Module designed for up to 1 Gbps download speeds as carriers deploy 5 carrier aggregation and 100Mhz channel bandwidth, requires activation and separately purchased service contract. Backwards compatible to HSPA 3G technologies. Check with service provider for coverage and availability in your area. Connection, upload and download speeds will vary due to network, location, environment, network conditions, and other factors. 4G ITE not available on all products, in all regions.

 18 Backlit keyboard is an optional feature.

 14 High-definition (FHD) Full high-definition (FHD) content required to view HD /FHD images.

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

 16 Actual brightness will be lower with touchscreen.

- 18 FORDER SEASON TO SEASON
- en/document/c05115630

 **Absolute agent is shipped turned off and will be activated when customers activate a purchased subscription. Subscription subscription is 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/greements/ computation-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 of Pre-Authorization Agreement and either obtain a PN or purchase one or more RSA SocurID tokens from Absolute Software.

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 **If PS use Click requires Windows 10 Pro or higher or Enterprise. See https://bit.ly?P1LFA, SurcClick for complete deaths.

 **If PS use Click requires Windows 10 Pro or higher or Enterprise. See intra-gibitally?P1LFA, SurcClick for complete deaths.

 **If PS use Run Gen's is available on select HPPCs with Windows 10 Pro, or hindows 10 Pro, or Windows 10

- 29 HP Sure Admin requires Windows 10 or higher, HP BIOS, HP Manageability Integration Kit from http://www.hp.com/go/clientmanagement and HP Sure Admin Local Access Authenticator smartphone app from the Android or Apple store.
 30 HP Client Security Manager Gen7 requires Windows and is available on the select HP Elite and Pro PCs.

- ** IPI Client Security Manager Gen7 requires Windows and is available on the select HP Elite and Pro PCs.

 **IP HP EliOSphere Gen6 features may vary depending on the platform and configuration.

 **IP HP EliOSphere Gen6 features may vary depending on the platform and configuration.

 **IP Secure Frase for the methods outlined in the National institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel" Optane".

 **IP Fine Heave Heave Intelligent Secure Frase for the methods outlined in the National Institute of Standards and Fine Heave Intelligent Heave
- 17 Availability may vary by country.

 18 Microsoft Office sold separately and requires Internet access for activation.

- ** Microsoft Office sold separately and requires Internet access for activation.

 ** Based on US EPAT* registration according to IEEE fibiol 2018 IEEPAT*. ** Status varies by country. Visit www.epact.net for more information.

 ** The term "10/10/10/100" or "Gigobit" Ethernet indicates compatibility with IEEE standard 802 3bt for Gigobit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigobit Ethernet server and network infrastructure is required.

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ent Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products a services. Nothing herein should be construed as constituting an additional warranty, HP shall not be liable for technical or editorial errors or omissions contained herein. Intel, Core, Pentium, Iris and Intel vPro are trademarks or registered trademarks and full proportion or its subsidiaries in the Usi. and other countries. NUIDA is a trademark and used by HP lnc. under license. DisplayPort* and the DisplayPort* logo are trademarks owned by the Video Electronics Standards Association (VESA*) in the United States and other countries. USB Type-C* and USB-C* are registered trademarks of USB Type-C* and USB-C* are registered trademarks of USB implementers Forum.



