

Maximum power meets maximum cool.

Huge processing power that stays cool.





Desktop levels of power

Your processor¹ and graphics stay cool even when your gameplay heats up with OMEN Tempest Cooling.



Immersive 16.1" screen

Escape into a massive screen with 3-sided bezel edges, high resolution, and TUV Eyesafe Low Blue Light².



Room for peripherals

Hook up an external drive, additional GPUs, or your smartphone with plenty of USB ports⁴.









Featuring

Get a fresh perspective

Windows 11 provides a calm and creative space where you can pursue your passions through a fresh experience. From a rejuvenated Start menu, to new ways to connect to your favorite people, news, games, and content—Windows 11 is the place to think, express, and create in a natural way.⁵

A dynamic processor that adapts to you for superior multi-tasking performance

12th Gen Intel® Core™ processors distributes performance where you need it the most — saving you time and increasing your ability to do the things you actually want. 6

144 Hz FHD anti-glare display

Reduce frustrating lag and image ghosting with a display that combines a 144 Hz refresh rate and a 1080p resolution for smooth, crisp gameplay.⁷

Eyesafe® Certified Display

Eyesafe® certified displays meet TÜV low blue light requirements and Eyesafe® standards for protecting your eyes from harmful blue light without distorting colors. Laptops with integrated Eyesafe® displays help reduce eyestrain and improve eye comfort when working for long periods of time.

HP QuickDrop

Wirelessly transfer photos, videos, documents and more between your PC and mobile device.

DTS: X® Ultra Technology

By producing authentic, spatially accurate 3D sound through any headset, this technology offers specially tuned audio modes for different game types to provide immersion for the best entertainment experience possible.⁸

An exceptionally rich audio experience

With HP Dual Speakers, HP Audio Boost, and custom tuning by the experts at Bang & Olufsen, entertainment comes to life with sound you can feel. Awaken your senses with PC audio perfection.

Ocean-bound plastic

Built with the environment in mind, our laptop design includes sustainable materials like ocean-bound plastic in the speaker enclosure and recycled aluminum.⁹

Keyboard keycaps contain post-consumer recycled plastic

We're bringing a more sustainable design to our keyboards by using keycaps made with post-consumer recycled plastic. ¹⁰

HP Fast Charge

When your laptop is low on power, no one has time to wait hours to recharge. Power down your device and go from 0 to 50% charge in approximately 30 minutes. 11

Wi-Fi 6E

Enjoy faster speeds, improved performance, greater capacity and lower latencies than earlier iterations with Wi-Fi 6E technology. 12

MU-MIMO supported

If you have several MU-MIMO devices in your home, MU-MIMO support works in combination with a MU-MIMO router to maximize network traffic for a smoother online experience.

HP Wide Vision HD Camera

The 88-degree, wide-angle field of view lets you video chat with the entire family or group of friends in crystal clear detail. 13

SuperSpeed USB Type-A 5Gbps signaling data rate

Plug in your external storage with this SuperSpeed USB Type-A port, featuring 5Gbps signaling data rate. 14

McAfee® LiveSafe™

Protect your operating system with a free 30-day McAfee® LiveSafe™ subscription. 15

PCle SSD storage

Boot up in seconds with lightning fast speed with up to 512 GB PCle SSD storage.

Dual channel memory

With dual channel technology, two channels work simultaneously to double the communication speed between the memory controller and the RAM increasing system performance.

Four Zone RGB keyboard

Allows you to backlight 4 independent zones with different RGB lighting. WASD keys are outlined to highlight key controls. It's all easily controlled through the OMEN Gaming Hub.

HP Imagepad with multi-touch gesture

This true multi-touch touchpad supports four finger gestures and lets you scroll, zoom, and navigate with a simple touch.







Specifications

Performance

Operating system

Windows 11 Home

Processor family

12th Generation Intel® Core™ i5 processor

Processor

Intel® Core™ i5-12500H (up to 4.5 GHz with Intel® Turbo Boost Technology, 18 MB L3 cache, 12 cores, 16 threads)6

Chipset

Intel® Integrated SoC

Memory 16 GB DDR5-4800 MHz RAM (2 x 8 GB)

Number of user-accessible

Storage 512 GB PCle® NVMe™ TLC SSD

Optical drive not included

Integrated: Intel® Iris® Xe Graphics
Discrete: NVIDIA® GeForce RTX™ 3050 Laptop GPU (4 GB GDDR6 dedicated)

Audio

Audio by Bang & Olufsen; DTS:X® Ultra; Dual speakers; HP Audio Boost

 $40.9\,\mathrm{cm}$ (16.1") diagonal, FHD (1920 x 1080), 144 Hz, 7 ms response time, IPS, micro-edge, antiglare, Low Blue Light, 300 nits, 100% sRGB

Screen-to-body ratio

Power supply

200 W Smart AC power adapter

Battery type 6-cell, 83 Wh Li-ion polymer ²³

Battery and Power

Up to 8 hours and 15 minutes³

Maximum battery life video playback
Up to 10 hours and 15 minutes¹⁰

Battery recharge time

Supports battery fast charge: approximately 50% in 30 minutes⁵

Connectivity

Network interface

Integrated 10/100/1000 GbE LAN

Wireless connectivity

Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)

MU-MIMO supported

Ports

2 SuperSpeed USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 2 SuperSpeed USB Type-A 5Gbps signaling rate; 1 HDMI 2.1; 1 RJ-45; 1 AC smart pin; 1 headphone/microphone

Expansion slots:

I multi-format SD media card reader

HP Wide Vision 720p HD camera with temporal noise reduction and integrated dual array digital microphones

Design

Product color

Shadow black cover and base, shadow black aluminum keyboard frame Paint finish cover and base, anodized keyboard frame

Software

HP apps

HP Support Assistant; HP Connection Optimizer; HP BIOS Protection; HP QuickDrop; MyHP; 0MEN Garning Hub $^{\rm 32}$

Software

25 GB Dropbox storage for 12 months¹; 1 month trial for new Microsoft 365 customers²⁴

Service & support

McAfee LiveSafe

Additional information

Part Number

P/N: 6K7W6UA#ABA

UPC/EAN code: 196786141072 Energy efficiency compliance

ENERGY STAR® certified; EPEAT® Silver registered 27

Sustainable impact specifications

Ocean-bound plastic in speaker enclosure(s) and bezel; Recycled metal in keyboard frame; Keyboard keycaps and scissors contain post-consumer recycled plastic

Weight Unpackaged: Starting at 2.35 kg

Packaged: 3.9 kg

Dimensions (Width x Depth x Height)

Unpackaged: 36.9 x 24.8 x 2.3 cm Packaged: 6.9 x 55.2 x 34.5 cm

Manufacturer Warranty

1-year limited hardware warranty. Additional information available at www.support.hp.com; 1-year limited technical support for software and initial setup (from date of purchase). ¹⁴

Input devices

Full-size, 4-zone RGB backlit, shadow black keyboard and 26-Key Rollover Anti-Ghosting Key technology HP Imagepad with multi-touch gesture support

Security management

Trusted Platform Module (Firmware TPM) support

Fingerprint reader not available

Sensors

IR Thermal sensor; Ambient light sensor

Key Selling Points Footnotes

- 1 Multi-core is designed to improve the performance of certain software products. Not all customers or software applications will necessarily benefit from the 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
- Eyesafe certified. See https://www.tuv.com/world/en/eye-comfort.html for more details. USB Type-C® and USB-C® are trademarks of USB Implementers Forum.
- 4 For optimal performance and battery chargeability while gaming and rendering, use the power adapter that ships with the PC. You can use the 100W/20V Type-C® adapter or power bank when running light loading tasks. System-off charging is only supported on 20V Type-C® adapter or power bank

Feature Messaging Footnotes

- 5 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.

 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. Intel⁵ numbering is not a measurement of higher performance.

 All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.
- EListening to personal stereo equipment at full volume for long periods can damage the user's hearing. To reduce the risk of hearing damage, lower the volume and amount of time listening at full volume.

 Percentage of ocean-bound plastic contained in each component varies by product. Laptops manufactured with recycled aluminum material in product cover. Percent of recycled aluminum varies by product.

- 10 Percentage of post-consumer recycled plastic contained in keycap varies by product.

 11 Recharges your battery up to 50% within 30 minutes when the system is off (using "shut down" command). Recommended for use with the HP adapter provided with the notebook, not recommended with a smaller capacity battery charger. After charging has reached 50% capacity, charging speed will return to normal speed. Charging time may vary +/-10% due to System tolerance. Available on select HP products. See
- http://store.hp.com for a full list of product features.

 12 Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6E (802.11ax) is backwards compatible with prior 802.11 specs. Wi-Fi 6E is part of Wi-Fi Certified. Only available in countries where Wi-Fi 6E (Tri-band - 2.4Ghz/5Ghz/6Ghz) is supported. Wi-Fi 6E is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately. The specifications for Wi-Fi 6E are draft 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 Wi-Fi 6E devices.

 13 Features may require software or other 3rd party applications to provide the described functionality.

 14 Actual throughput may vary.
- 15 Internet service required and not included. Subscription required after 30 days.

Technical Specifications Footnotes

- 1 25 GB of free Dropbox storage for 12 months from date of registration. For complete details and terms of use, including cancellation policies, visit the Dropbox website at https://www.dropbox.com/help/space/hpromotion. Internet service required and not included.

 Free 30 day subscription of McAfee LiveSafe service included. Internet access required and not included. Subscription required after expiration.
- ³ Windows MobileMark 18 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 https://bapco.com/products/mobilemark-2018/ for additional details.

 ⁵ Recharges your battery up to 50% within 30 minutes when the system is off (using "shut down" command). Recommended for use with the HP adapter provided with the notebook, not recommended with a smaller
- capacity battery charger. After charging has reached 50% capacity, charging speed will return to normal speed. Charging time may vary +/-10% due to System tolerance. Available on select HP products. So http://store.hp.com for a full list of product features.
- f 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.

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

 Battery life tested by HP using continuous FHD video playback, 1080p (1920x1080) resolution, 150 nits brightness, system audio level at 17% as image default, player audio level at 100%, played full-screen from local storage, headphone attached or through speaker (if no audio jack port), wireless on but not connected. Actual battery life will vary depending on configuration and maximum capacity will naturally decrease with time and
- usage.

 14 Wireless access point and internet service required and sold separately. Availability of public wireless access points limited; Call 1.800.474.6836 or support.hp.com for more information on Care Packs available after standard warranty expires. After standard warranty expires, an incident fee may apply.

 18 Percent of active plus nonactive viewing area to active viewing area plus border. Measure with lid vertical to the desk.

 19 For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.

 23 A media best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.

- 24 Actual battery Watt-hours (Wh) will vary from design capacity. Battery capacity will naturally decrease with shelf life, time, usage, environment, temperature, system configuration, loaded apps, features, power management settings and other factors.

 24 Must activate within 180 days of Windows activation.
- ²⁴ Must activate within 180 days of Windows activation.
 ²⁷ ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency; Based on U.S. EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit www.epeat.net for more information.

 ³² HP BIOS Protection works with Windows 10 or 11 that ships with your PC; For more information visit hp.com/go/hpsupportassistant. (Link will vary outside of the U.S.) HP Support Assistant is only available on Windows-based PCs. Internet connection required for updating and connecting to HP Support.

 ³³ Percentage of orean-bound plastic contained in each component varies by product.
- Percentage of ocean-bound plastic contained in each component varies by product
- 40 Laptops manufactured with recycled metal material in product cover. Percentage of recycled metal varies by product.

 41 Keyboard components contain post-consumer recycled plastic. Percentage of post consumer recycled contained in each component varies by product.

