Enjoy powerful fun anywhere.

The OMEN by HP 16 inch gaming laptop is ready to go wherever you are. Enjoy desktop-level power with a 14th Gen Intel® Core™ processor¹ and a modern NVIDIA® graphics card, both regulated by enhanced internal cooling. The screen is equally impressive with high resolution, smooth framerates, and and anti-glare features.



*Product image may differ from actual product



Desktop levels of power anywhere

The processor, graphics card, and memory to handle the neediest of games wherever you may be.

Sustainability in action

Sustainability in action

EPEAT® Gold² and ENERGY STAR® certified.



Laptop cooling excellence

Performance doesn't matter if your laptop sounds like a jet engine, so choose OMEN's enhanced thermal design.



Buttery smooth 16.1" display

Expect immersion with a massive 3-sided bezel edge, high resolution 16.1" display with antiglare features.











Featuring

Get a fresh perspective

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.³

Beyond Fast

NVIDIA® GeForce RTX™ 40 Series GPUs are beyond fast. Powered by the NVIDIA Ada Lovelace architecture which delivers a leap in both performance and Al-powered graphics. Experience lifelike virtual worlds with ray tracing and ultra-high FPS gaming.⁴

FHD IPS display

Enjoy crystal-clear images from any angle. With 178° wide-viewing angles and a vibrant 1920 x 1080 resolution, you'll always have a great view of your favorite content. 5

Flicker-free

Using DC Dimming technology that controls brightness by adjusting direct current rather than cycling the backlight, we can eliminate screen flickering for more comfortable viewing. 6

Wi-Fi 6E

Enjoy faster speeds, improved performance, greater capacity and lower latencies than earlier iterations with Wi-Fi 6E technology.⁷

HP True Vision FHD

Video chat in vibrant clarity with Full HD resolution, even in low light, and make every conversation a face-to-face experience for a better way to stay in touch.⁸

USB Type-A 5Gbps signaling data rate

Plug in your external storage with this USB Type-A port, featuring 5Gbps signaling data rate. 9

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.

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.

Recommended accessories and services (not included)





Specifications



Performance

Operating system Windows 11 Home Processor Intel® Core™ i7-14700HX (up to 5.5 GHz with Intel® Turbo Boost Technology, 33 MB L3 cache, 20 cores, 28 threads)^{6,7} Processor family: Intel® Core™ i7 14th generation processor Chipset Intel® HM770 Memory 16 GB DDR5-5600 MHz RAM (2 x 8 GB) Transfer rates up to 5600 MT/s. Number of User-accessible Memory Slots: 2 Storage 1TB PCIe® Gen4 NVMe™ TLC M.2 SSD 25 GB Dropbox storage for 12 months¹ Graphics Discrete: NVIDIA® GeForce RTX™ 4070 Laptop GPU (8 GB GDDR6 dedicated); Advanced Optimus Audio DTS:X® Ultra; Dual speakers; HP Audio Boost; HyperX Display 40.9 cm (16.1") diagonal, FHD (1920 x 1080), 165 Hz, 7 ms response time, IPS, microedge, anti-glare, Low Blue Light, 300 nits, 100% sRGB^{17,21,28} Screen-to-body ratio 83.17%¹⁸ Power 280 W Smart AC power adapter; Battery type 6-cell, 83 Wh Li-ion polymer²³ Battery and Power Up to 6 hours and 15 minutes³; Supports battery fast charge: approximately 50% in 30 minutes⁵ Maximum battery life video playback Up to 8 hours¹⁰

Connectivity

Network interface

Integrated 10/100/1000 GbE LAN

Wireless connectivity Intel* Wi-Fi 6E AX211 (2x2) and Bluetooth* 5.3 wireless card (supporting gigabit data rate) 11,12,46

Modern Standby (Connected); HP Dynamic Range Technology

Ports

1 USB Type-A 5Gbps signaling rate; 1 USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 2 Thunderbolt[™] 4 with USB Type-C[®] 40Gbps signaling rate (USB Power Delivery, DisplayPort[™] 1.4, HP Sleep and Charge); 1 HDMI 2.1; 1 RJ-45; 1 AC smart pin; 1 headphone/microphone combo^{19,42} **Webcam**

HP True Vision 1080p FHD camera with temporal noise reduction and integrated dual array digital microphones

Sustainability

Ecolabels

EPEAT[®] Gold registered **Sustainable impact specifications** Ocean-bound plastic in speaker enclosure(s) and bezel; Keyboard mechanism made from agriculture waste; Recycled metal in keyboard frame; Keyboard keycaps and scissors contain post-consumer recycled plastic^{39,40,41}

Design

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

Software

HP apps HP Support Assistant; HP Connection Optimizer; MyHP; OMEN Gaming Hub Software Intel® Unison™; 1 month trial for new Microsoft 365 customers²⁴ Service & support McAfee Online Protection 30-day trial; 1-month Adobe free trial offer; Xbox Game Pass 1-month free trial ^{2,25,43}

Additional information

Part Number P/N: 9R7Y7EA #ABU UPC/EAN code: 198122004980 Weight 2.39 kg; Packed: 4.28 kg Dimensions

36.9 x 25.94 x 2.35 cm; Packed: 6.9 x 55.2 x 34.5 cm

Manufacturer Warranty

1 year (1/1/0) limited warranty includes 1 year of parts and labor. No on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply. **Keyboard**

Full-size, per key RGB backlit, shadow black keyboard and 26-Key Rollover Anti-Ghosting Key technology

HP Imagepad Features

NVIDIA[®] G-SYNC[®] support

Security management

Camera privacy shutter; Trusted Platform Module (Firmware TPM) support **Sensors**

IR thermal sensor



Footnotes

Key Selling Points Footnotes

¹Multi-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. ² 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.

Feature Messaging Footnotes

³ 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.
⁴ ©2023 NVIDIA Corporation. NVIDIA, the NVIDIA logo, GeForce, and GeForce RTX are registered trademarks and/or trademarks of NVIDIA Corporation in the United States and other countries. All other trademarks and copyrights are the property of their respective owners.

⁵ Full high-definition (FHD) content is required to view FHD images.

⁶ The flicker-free capability eliminates screen flickering through integrating DC-dimming LED backlights.

¹Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6E (80211ax) is backwards compatible with prior 80211 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.

⁸ Features may require software or other 3rd party applications to provide the described functionality.

⁹ Actual throughput may vary.

Technical Specifications Footnotes

¹25 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/hp-promotion. Internet service required and not included.

² Internet access required and not included. McAfee is pre-installed on your PC and an account is required for activation. Subscription renewal required after trial period. VPN feature is not available in India, China, Syria or

North Korea. McAfee is not compatible with Windows 11 in S mode. You'll need to permanently switch out of S mode. There's no charge to switch out of S mode, but you won't be able to turn it back on. ³ MobileMark 25 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-25/ 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

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. See http://store.hp.com for a full list of product features.

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.

¹⁰ 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.
¹¹ 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.

¹² Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, 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 6GHz is supported.

¹⁷ All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

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.

²¹ TUV Low Blue Light is the Display Compliance Test Specification quality. See https://www.certipedia.com/?locale=en#search for more details.

²³ 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 settinas and other factors.

²⁴ Must activate within 180 days of Windows activation.

²⁵ Offer available worldwide (excluding China and embargoed countries or other countries identified as restricted by applicable law or regulation) to new and existing subscribers who are 18+. Click on the Adobe icon in the start menu to redeem a 1-month free trial membership for select Adobe software. The software is tied to the device and is not transferrable. If you would like to sign up for an auto-renewing subscription, you can provide your payment method, your subscription will automatically renew at the then current rate on your renewal date until you cancel. If you cancel. If you cancel lif you cancel up anytime via your Adobe Account page or by contacting Customer Support. Please see current prices for Adobe products available in this offer. Offer not available to Education, OEM, or volume licensing customers. Subject to availability where the recipient resides. Additional terms and conditions may apply. VOID WHERE PROHIBITED OR RESTRICTED BY LAW.

28 Eyesafe® Display for Low Blue Light is the Display Compliance Test Specification quality. See https://eyesafe.com for more details

³⁷ Weight and system dimensions may fluctuate due to configuration and manufacturing variances

³⁹ 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 scissors contain natural, renewable feedstock based on mass balance approach; Keyboard keycaps contain post-consumer recycled plastic. Percentage of post consumer recycled contained in each component varies by product.

⁴² 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.

⁴³ Xbox Game Pass sold separately. Credit card required. Unless you cancel, you will be charged the then-current regular membership rate when the promotional period ends. Terms, exclusions, and streaming limits apply. Xbox Cloud Gaming (Beta): select devices and regions. After term, active membership required to play games and online multiplayer. Game catalog varies over time, region, and by device. DLC sold separately, if a game is removed from catalog or your membership ends, you will need to purchase the game separately to use your DLC. If you're already an Xbox Live Gold and/or Game Pass for Console/PC member, any days remaining in your membership(s) will be converted to Ultimate using a conversion ratio. Future code redemptions also subject to conversion ratio. All conversions to Ultimate are final. Details and system requirements at www.xbox.com/gamepass. Offer valid in all Xbox Game Pass markets excluding Russia. Digital Direct Your digital content will be delivered directly to your device during set-up; no codes required.

15 The Flicker free capability is eliminating screen flickering through integrating DC-dimming LED backlights or LED emissions. OLED panel is functional with DC-DIMMING when above 100 nits.

⁴⁶ Bluetooth^{*} 5.3 operation requires Microsoft OS/Chrome OS support. Until Microsoft OS/Chrome OS support is available, Bluetooth^{*} 5.3 will function as Bluetooth^{*} 5.2 or lower.

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