

OMEN Gaming Laptop 17-db0016nm

Everything you need, nothing you don't

With the new OMEN 17, we didn't waste time loading it with features you'd never use. Instead, with an impressive 17" IPS display with 100% sRGB, new AI-enhanced AMD Ryzen™ 8000 CPUs¹ and NVIDIA® RTX™ 40 Series GPUs, as well as a 1-zone RGB numeric keyboard, it's everything you need for great gaming and nothing you don't.



*Product image may differ from actual product



Immersion-ready display

With an impressive 17" IPS display with VRR and 100% sRGB, this is all the screen you'll need.²



Next-gen AI performance

The future of gaming is here with new AI-enhanced AMD Ryzen™ 8000 Series CPUs¹ and NVIDIA® RTX™ 40 Series GPUs.



Built for gaming, ready for anything

With a 1-zone RGB numeric keyboard and FHD camera, the new OMEN 17 is ready for anything.³

Sustainability in action

We're in this together

Doing our part with recycled materials, and EPEAT® Gold with Climate+⁴ and ENERGY STAR® certification.

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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.⁵

AMD Ryzen™ 7 Processor

With 8 cores, 16 threads, and a 20 MB cache, this is a multi-threaded performance beast. The newly-designed, ultra-efficient architecture dominates even the most CPU intensive games, without issue.¹

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 AI-powered graphics. Experience lifelike virtual worlds with ray tracing and ultra-high FPS gaming.⁶

AMD FreeSync™ Premium Technology

Every gamer deserves perfectly smooth gameplay and peak performance. Game confidently with a high refresh rate, low framerate compensation, and low latency. AMD FreeSync™ Premium certified monitors are here.⁷

Variable refresh rate

Get the best performance for your creative works, while not sacrificing battery life. VRR technology allows your PC to dynamically adjust its refresh rate based on the frame rate of the content you're viewing.

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 to reduce eyestrain when working for long periods of time.

3ms response time

How fast your display's pixels respond is crucial for a smooth picture. With a 3-millisecond response time, your action-filled content will look crisp and fluid without motion blur.⁸

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.⁹

16:9 aspect ratio

A 16:9 aspect ratio lets you see all of your game.

100% sRGB

Showcase your creations in all their colors on the 100% sRGB display for maximum color broadness and accuracy.

Thoughtful design

HP incorporates increasing amounts of recycled, renewable, and non-virgin raw materials. Built with the environment in mind, this product includes a percentage of ocean-bound plastic in the design.¹⁰

Keyboard contains post-consumer recycled plastic

We're bringing a more thoughtful design to our keyboards by using post-consumer recycled plastic in the design.¹¹

ENERGY STAR®

This product meets the criteria that require computers to operate efficiently to get ENERGY STAR certification.¹²

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.¹³

Effortlessly connected

Enjoy faster speeds, improved performance and greater capacity with Wi-Fi 6 and Bluetooth® 5.3 wireless card.¹⁴

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.¹⁵

USB Type-A 5Gbps signaling data rate

Plug in your external storage with this USB Type-A port, featuring 5Gbps signaling data rate.¹⁶

McAfee® LiveSafe™

Free 12-month subscription of McAfee® LiveSafe™ service included. McAfee® LiveSafe™ service enriches your digital life by protecting your data, identity and all your devices so you can connect with confidence.¹⁷

HP Audio Boost

Take your audio experience to the next level with smart amplification technology giving you loud, clear and dynamic sound.

Audio tuned by HyperX

Immerse yourself in the sweet sounds of audio mixed and tuned by HyperX.

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.

1-Zone RGB Keyboard with Numpad

Illuminate your entire keyboard and numpad with 1-zone RGB.

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.



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Specifications



Performance

Operating system
Windows 11 Home

Processor
AMD Ryzen™ 7 8845HS (up to 5.1 GHz max boost clock, 16 MB L3 cache, 8 cores, 16 threads)^{6,7}
Processor family: AMD Ryzen™ 7 processor

Chipset
AMD integrated SoC

Memory
32 GB DDR5-5600 MT/s (2 x 16 GB)
Transfer rates up to 5600 MT/s.
Number of User-accessible Memory Slots: 2

Storage
1 TB PCIe® NVMe™ M.2 SSD
25 GB Dropbox storage for 12 months¹

Graphics
Discrete: NVIDIA® GeForce RTX™ 4070 Laptop GPU (8 GB GDDR6 dedicated) ;

Audio
HyperX;Dual speakers;DTS:X® Ultra;HP Audio Boost

Display
43.9 cm (17.3") diagonal, QHD (2560 x 1440), 48-240 Hz, 3 ms response time, IPS, micro-edge, anti-glare, Low Blue Light, 300 nits, 100% sRGB^{17,21,28}

Screen-to-body ratio
84.93%¹⁸

Power
230 W AC power adapter;

System coolers

Battery type
6-cell, 83 Wh Li-ion polymer²³

Battery and Power
Up to 6 hours and 45 minutes³;
Supports battery fast charge: approximately 50% in 30 minutes⁵

Maximum battery life video playback
Up to 9 hours and 45 minutes¹⁰

Connectivity

Network interface
Integrated 10/100/1000 GbE LAN

Wireless connectivity
Realtek Wi-Fi 6 (2x2) and Bluetooth® 5.3 wireless card (supporting gigabit data rate)^{11,12,13,46}
Modern Standby (Connected);HP Extended Range Wireless LAN

Ports
2 USB Type-A 10Gbps signaling rate; 1 USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 1 AC smart pin; 1 HDMI-out 2.1; 1 headphone/microphone combo; 1 RJ-45; 1 USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4a, HP Sleep and Charge)^{19,42}

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

Sustainability

Ecolabels
EPEAT® Gold with Climate+²⁷

Energy star certified
ENERGY STAR® certified

Sustainable impact specifications
Ocean-bound plastic in speaker enclosure(s) and bezel; Keyboard keycaps and scissors contain post-consumer recycled plastic^{39,41}

Design

Product color
Shadow black, black chrome logo
Paint finish

Software

HP apps
HP Support Assistant; HP Connection Optimizer; OMEN Gaming Hub; myHP

Software
Copilot in Windows with Copilot key;
McAfee Online Protection 1-year subscription²;
1 month trial for new Microsoft 365 customers²⁴

Service & support
1-month Adobe free trial offer; PC Game Pass 3-month trial²⁵
McAfee Online Protection 1-year subscription²

Additional information

Part Number
P/N: B9PW2EA #BED
UPC/EAN code: 198990767888

Weight
2.95 kg;
Packed: 4.64 kg

Dimensions
39.75 x 27.79 x 2.75 cm (front); 39.75 x 27.79 x 3 cm (rear);
Packed: 9.4 x 46.1 x 33.2 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, 1-zone RGB backlit, shadow black keyboard with numeric keypad
HP Imagepad;Precision Touchpad support

Features
AMD FreeSync™ Premium²⁹

Security management
Camera privacy shutter; Trusted Platform Module (Firmware TPM) support

Sensors
IR thermal sensor



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Footnotes

Messaging Footnotes

¹ 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.

² All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

³ Camera resolution refers to the image sensor active pixels. The actual image capture pixels and aspect ratio depend on the app selected.

⁴ See www.epeat.net for registration status and tier levels by country.

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>.

⁶ ©2024 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.

⁷ Requires a monitor and AMD Radeon™ graphics, both with FreeSync Premium support. AMD FreeSync Premium requires mandatory low framerate compensation and at least 120 Hz refresh rate at minimum FHD. See www.amd.com/freesync for complete details. Confirm capability with your system manufacturer before purchase. GD-161.

⁸ All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary, either higher or lower.

⁹ The flicker-free capability eliminates screen flickering through integrating DC-dimming LED backlights.

¹⁰ Percentage of ocean-bound plastic contained in each component varies by product.

¹¹ Keyboard components contain post-consumer recycled plastic. Percentage of post consumer recycled contained in each component varies by product.

¹² 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.

¹³ 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.

¹⁴ 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. Wi-Fi 6 is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels. Wi-Fi 6 (802.11ax) is not supported in Belarus where Wi-Fi settings will be optimized to local regulatory requirements (802.11ac). 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.

¹⁵ Features may require software or other 3rd party applications to provide the described functionality.

¹⁶ Actual throughput may vary.

¹⁷ Internet service required and not included. Subscription required after the 12 month.

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/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 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.

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. AMD's numbering is not a measurement of clock speed.

⁷ Max Boost clock frequency performance varies depending on hardware, software and overall system configuration.

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 6 is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels.

¹² 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.

¹³ Wi-Fi 6 (802.11ax) is not supported in Belarus where Wi-Fi settings will be optimized to local regulatory requirements (802.11ac).

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 settings 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 at sign-up. By adding a payment method, your subscription will automatically renew at the then current rate on your renewal date until you cancel. If you cancel before the end of the one-month free trial, you won't be charged. You can cancel your subscription 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.

²⁹ AMD FreeSync™ /FreeSync™ Premium/FreeSync™/FreeSync™ Replay Premium Pro is enabled on FHD or higher resolution displays, with the additional requirements, such as at least 120Hz refresh rate, low framerate compensation, and HDR to support AMD FreeSync™ Premium/ FreeSync™ Premium Pro/FreeSync™ Replay. AMD Radeon Graphics and/or AMD A-Series APU-compliant monitors with DisplayPort/HDMI Adaptive-Sync required. AMD 15.11 Crimson driver (or newer) required to support FreeSync over HDMI. Adaptive refresh rates vary by monitor. AMD FreeSync™ /FreeSync™ Premium/FreeSync™/FreeSync™ Replay Premium Pro technology requires AMD Radeon graphics and a display certified by AMD. See www.amd.com/freesync for complete details. GD-127 © 2023 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, Radeon, FreeSync, and combinations thereof are trademarks of Advanced Micro Devices, Inc.

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.

⁴¹ Keyboard components 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.

⁴⁵ 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 100nits.

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.

