

# OMEN 16 inch Gaming Laptop PC

## 16-ap0053dx



### Battle tested, never bested

Your next-gen NVIDIA® graphics and AMD Ryzen™ processor won't do you any good if they're constantly overheated, so skip the burnout and enjoy true uninterrupted gaming with the OMEN 16.

#### Product overview

- **Cooling that keeps up:** Built to handle the heat, the OMEN 16 features high-efficiency fans with increased noise reduction to keep your gaming uninterrupted. Defy the heat and stay focused, knowing your laptop delivers exceptional cooling and quieter performance.
- **Instantly raise your game:** Introducing OMEN's newest technologies that adapt to your needs. OMEN AI gets you the best possible FPS for your unique setup with just the click of a button, and Unleashed Mode allows you to manually boost your power past its limits for a faster, more powerful experience.
- **A new generation of performance:** Enjoy the latest technology with the latest AMD Ryzen™ processor and next-gen NVIDIA® RTX™ graphics. The OMEN 16 boosts power past the limits, ensuring your performance is smooth, fast, and immersive, so you can fully experience every detail of your game.
- **Steady connection, even steadier aim:** Never miss a call or headshot with a high refresh rate display and a built-in FHD webcam, keeping your aim sharp and connection strong during those high-stake matches. Make your laptop your own and conquer every level with confidence.

#### Key specifications

- **Operating system:** Windows 11 Home<sup>(1)</sup>
- **Processor:** AMD Ryzen™ 9 8940HX<sup>(2a)</sup>
- **Display:** 16-inch diagonal, 2K (1920 x 1200), 144 Hz, IPS, micro-edge, anti-glare
- **Memory:** 32 GB DDR5-5200 MT/s (2 x 16 GB)
- **Internal storage:** 1 TB PCIe® Gen4 NVMe™ M.2 SSD<sup>(15)</sup>
- **Graphics:** NVIDIA® GeForce RTX™ 5060 Laptop GPU (8 GB GDDR7 dedicated)<sup>(13)</sup>
- **Sound:** HyperX with dual speakers
- **Battery life:**
  - Up to 3 hours and 30 minutes (mixed usage)<sup>(85a)</sup>
  - Up to 6 hours (video playback)<sup>(75)</sup>
- **Wireless:** Wi-Fi 6E (2x2)<sup>(19c)</sup> and Bluetooth® 5.3 wireless card<sup>(25)(26)</sup> (supporting gigabit data rate)<sup>(7e)</sup>
- **Security:** Camera privacy shutter
- **Camera:** HP True Vision 1080p FHD camera with temporal noise reduction and integrated dual array digital microphones<sup>(89)(89b)</sup>
- **Product weight:** 5.42 lb<sup>(76)</sup>
- **Keyboard:** Full-size, 4-zone RGB backlit, shadow black keyboard with numeric keypad and 26-Key Rollover Anti-Ghosting Key technology

#### Product features

- **Get a fresh perspective with Windows 11:** 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.<sup>(1)</sup>
- **Microsoft Copilot:** Kickstart your creativity and productivity with Microsoft Copilot. Complements your capabilities and creativity with intelligent assistance and relevant answers. And now with the Copilot key, you can access this AI-powered intelligent assistant with a single press of a button.<sup>(41)</sup>
- **Top tier performance for serious workloads:** The AMD Ryzen™ 9 8940HX is built off AMD's "Zen 4" processor architecture to deliver the ultimate in performance and power efficiency for notebook users.
- **Game changer:** Powered by NVIDIA® Blackwell, GeForce RTX™ 5060 Laptop GPU brings game-changing AI capabilities to gamers and creators.
- **AMD FreeSync™ technology:** Say goodbye to choppy gameplay and enjoy tear free, seamless visuals across all your games. AMD FreeSync™ display technology optimizes refresh rates for flawless sync with your graphics.<sup>(45)</sup>
- **2K IPS 144Hz display:** Transform your content with 1920 x 1200 resolution and 178-degree wide-viewing angles.<sup>(20)</sup>

#### Additional product features

- **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.<sup>(61)</sup>
- **HP Fast Charge:** Go from 0 to 50% charge in approximately 30 minutes.<sup>(72)</sup>
- **PCIe® Gen4 NVMe™ M.2 SSD:** With high-speed data transfer, the PCIe® Gen4 NVMe™ M.2 SSD offers fast speed and efficient storage.
- **Effortlessly connected:** Enjoy faster speeds, improved performance, greater capacity and lower latencies than earlier iterations with Wi-Fi 6E and Bluetooth® 5.3 wireless card.<sup>(19d)(25)(26)</sup>
- **HP True Vision FHD camera:** 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.<sup>(89)</sup>
- **HyperX Audio with dual speakers:** HyperX Audio gives a pristine audio experience that accents the dynamic sounds of gaming and beyond.
- **Xbox Game Pass Premium 2-month trial:** Enjoy 2 months of Xbox Game Pass Premium. Free with your new HP Laptop. Access a library of legendary, high-quality games, get exclusive in-game perks, partner discounts, and earn points annually with Xbox Rewards.<sup>(60)</sup>

#### Product design

- **4-zone RGB keyboard:** Allows you to backlight 4 independent zones with different RGB keyboard lighting. WASD keys are outlined to highlight key controls. It's all easily controlled through the OMEN Gaming Hub.
- **Camera shutter:** Stay secure with a physical camera shutter. Video chat with peace of mind with a privacy camera you can close when not in use.
- **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.
- **Micro-edge display:** See more of your screen with a micro-edge display that maximizes your viewing area.

#### Created with the planet in mind

HP is dedicated to driving progress toward a more sustainable future and making responsible choices for the environment and our customers. We are innovating new ways to reduce the amount of materials in our products and packaging—and to use more recycled materials in their design. Together we can make a difference.

- Built with the environment in mind, this laptop is designed using sustainable materials like:
  - Ocean-bound plastic in bezel<sup>(63d)</sup>
  - Keyboard plate, keycaps and scissiors contain post-consumer recycled plastic<sup>(63f)</sup>
  - HP's outer boxes and fiber cushions used in packaging are 100% sustainably sourced and recyclable.<sup>(63e)</sup>

#### Warranty and support

Our Customer Support Team consistently provides quick, responsive assistance in the U.S., Canada and Latin America.

#### Included with your product:

- **HP's Hardware Limited Warranty:** Full warranty details are included with your product.
- **Technical Support for Software & Initial set-up:** Warranty details are included with your product.

#### Support Options:

- **HP Support Assistant - HPSA:** Optimized to enhance your support experience. Help for your PC and HP printers whenever you need it.<sup>(56)</sup>
- **Online Support:** For technical support with this product, visit HP Customer Support <http://support.hp.com>.<sup>(9)</sup>
- **Social Media Support:** To find solutions, ask questions, and share tips, join us on the HP Support Community at [community.hp.com](http://community.hp.com), on X at [x.com/HPSupport](https://x.com/HPSupport), and Facebook at [facebook.com/HPSupport](https://facebook.com/HPSupport).<sup>(9)</sup>



## Specifications

<b>Operating system</b>	• Windows 11 Home <sup>(1)</sup>
<b>Processor</b>	• AMD Ryzen™ 9 8940HX <sup>(2a)</sup> • 16-Core
<b>Processor speed</b>	• Up to 5.3 GHz max boost clock <sup>(2d)</sup>
<b>Processor cache</b>	• 64 MB L3 cache
<b>Memory</b>	• 32 GB DDR5-5200 MT/s (2 x 16 GB)
<b>Accessible memory slots</b>	• 2
<b>Video graphics</b>	• NVIDIA® GeForce RTX™ 5060 Laptop GPU (8 GB GDDR7 dedicated) <sup>(13)</sup>
<b>Internal storage</b>	• 1 TB PCIe® Gen4 NVMe™ M.2 SSD <sup>(15)</sup>
<b>Finish and features</b>	• Top cover: shadow black • Keyboard deck: shadow black • Logo: black chrome
<b>Camera</b>	• HP True Vision 1080p FHD camera with temporal noise reduction and integrated dual array digital microphones <sup>(89)(89b)</sup>
<b>Display</b>	• 16-inch diagonal, 2K (1920 x 1200), 144 Hz, IPS, micro-edge, anti-glare, 300 nits, 62.5% sRGB <sup>(20)</sup> • Variable Refresh Rate support • AMD FreeSync™ <sup>(65)</sup>
<b>Screen to body ratio</b>	• 87.4% <sup>(40)</sup>
<b>Network card</b>	• Integrated 10/100/1000 GbE LAN <sup>(29)</sup>
<b>Wireless</b>	• Wi-Fi 6E (2x2) <sup>(19)</sup> and Bluetooth® 5.3 wireless card <sup>(25)(26)</sup> (supporting gigabit data rate) <sup>(7a)</sup>
<b>Sound</b>	• HyperX with dual speakers • DTS: X® Ultra
<b>Integrated keyboard</b>	• Full-size, 4-zone RGB backlit, shadow black keyboard with numeric keypad and 26-Key Rollover Anti-Ghosting Key technology • HP Imagepad
<b>External notebook ports</b>	• 1 USB Type-C® 10Gbps signaling rate (USB Power Delivery 3.0, DisplayPort™ 1.4, HP Sleep and Charge) <sup>(42)(48)(50)(64)</sup> • 1 USB Type-A 10Gbps signaling rate • 2 USB Type-A 5Gbps signaling rate • 1 RJ-45 • 1 Headphone/microphone combo • 1 AC Smart pin • 1 HDMI 2.1
<b>Dimensions</b>	• <b>Unpackaged:</b> 14.07 in (W) x 10.59 in (D) x 1.03 in (front) - 1 in (rear) (H) • <b>Disclaimer:</b> Rear height is measured without the bump out (0.17 in) • <b>Packaged:</b> 22.32 in (L) x 2.48 in (W) x 12.01 in (H)
<b>Weight</b>	• <b>Unpackaged:</b> 5.42 lb <sup>(76)</sup> • <b>Packaged:</b> 7.05 lb
<b>Security</b>	• Camera privacy shutter
<b>Power</b>	• 4-cell, 70 Wh Li-ion polymer battery <sup>(21)</sup> • 230 W AC power adapter
<b>Battery life</b>	• Up to 3 hours and 30 minutes (mixed usage) <sup>(85a)</sup> • Up to 6 hours (video playback) <sup>(75)</sup>

## Learn more at [hp.com](https://hp.com)

<sup>(1)</sup> 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>. <sup>(2a)</sup> 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. AMD and Radeon are trademarks of Advanced Micro Devices, Inc. <sup>(2d)</sup> Max Boost clock frequency performance varies depending on hardware, software and overall system configuration. GHz refers to internal clock speed of the processor. Other factors besides clock speed may impact system and application performance. <sup>(7a)</sup> 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. <sup>(89)</sup> McAfee is preinstalled 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 and the McAfee logo are trademarks or registered trademarks of McAfee, Inc. in the United States and other countries. <sup>(9)</sup> Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. <sup>(13)</sup> ©2022 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. <sup>(15)</sup> Actual formatted capacity is less. Portion of internal storage is reserved for preloaded content. <sup>(19)</sup> 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. <sup>(20)</sup> All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. <sup>(21)</sup> 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. <sup>(22)</sup> 100GB of free online storage for 90 days from date of registration. For complete details and terms of use, including cancellation policies, visit the website at [dropbox.com](https://dropbox.com). Internet service required and not included. <sup>(23)</sup> HP BIOS Protection works with Windows 11 that ships with your PC. <sup>(25)</sup> Bluetooth® 5.3 operation requires Microsoft OS/Chrome OS support. Until Microsoft OS/Chrome OS support is available, Bluetooth® 5.2 or lower. <sup>(26)</sup> Bluetooth® is a trademark owned by its proprietor and used by HP Inc. under license. <sup>(29)</sup> Actual speeds may vary. <sup>(40)</sup> Percent of active plus nonactive viewing area to active viewing area plus border. Measure with lid vertical to the desk. <sup>(41)</sup> Copilot key feature availability varies by market, see [aka.ms/keysupport](https://aka.ms/keysupport). Copilot is NOT available in China, Russia, Belarus, and embargoed regions Cuba, Iran, North Korea, Crimea. <sup>(42)</sup> USB Type-C® and USB-C® are trademarks of USB Implementers Forum. <sup>(48)</sup> See [www.amd.com/freesync](https://www.amd.com/freesync) for complete details. © 2024 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, Radeon, FreeSync, and combinations thereof are trademarks of Advanced Micro Devices, Inc. <sup>(48)</sup> 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. <sup>(50)</sup> DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. <sup>(53)</sup> Call 1.800.474.6836 or [support.hp.com](https://support.hp.com) for more information on Care Packs available after standard warranty expires. After standard warranty expires, an incident fee may apply. <sup>(56)</sup> For more information visit [hp.com/go/hpsupportassistant](https://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. <sup>(60)</sup> Subscription continues automatically at regular monthly price unless cancelled. Subject to <https://www.xbox.com/legal/subscription-terms>. Benefits vary by Xbox Game Pass plan. Game library and in-game benefits vary over time, by region, device, and Xbox Game Pass plan. Game must be installed to access in-game benefits. For a list of cloud and non-cloud markets and supported regions, visit: [xbox.com/regions](https://xbox.com/regions). Terms apply, see [xbox.com/gamepass](https://xbox.com/gamepass) for more. <sup>(61)</sup> 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. <sup>(63d)</sup> Percentage of ocean-bound plastic contained in each component varies by product. <sup>(63e)</sup> 100% outer box/corrugated cushion packaging made from sustainably sourced certified and recycled fibers. Fiber cushions made from 100% recycled wood fiber and organic material. Excludes plastic bags and plastic foam sheeting. <sup>(63b)</sup> Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 EPEAT standard. <sup>(64)</sup> For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device. <sup>(72)</sup> Recharges your battery up to 50% within 30 minutes when the system is off using "shut down" command, using HP adapter provided with the notebook or recommended power adapter disclosed in specifications (see <https://store.hp.com>). After charging has reached 50% capacity, charging speed will return to normal speed. Charging time may vary +/-10% due to system tolerance. <sup>(75)</sup> Battery life tested by HP using continuous FHD video playback, 1080p (1920x1080) resolution, 200 nits brightness, system audio level 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. <sup>(76)</sup> Weight and system dimensions may fluctuate due to configuration and manufacturing variances. <sup>(85a)</sup> 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 [bapco.com/products/mobilemark-25/](https://bapco.com/products/mobilemark-25/) for additional details. <sup>(88a)</sup> 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 transferable. 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. <sup>(89)</sup> Features may require software or other 3rd party applications to provide the described functionality. Internet service required and not included. <sup>(89b)</sup> Camera resolution refers to the image sensor active pixels. The actual image capture pixels and aspect ratio depend on the app selected. Actual product may vary from image shown on datasheet. © Copyright 2025 HP Development 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 and services. Nothing shall be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. 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<b>Warranty and support</b>	• 1-year limited hardware warranty. Additional information available at <a href="https://www.support.hp.com">www.support.hp.com</a> <sup>(9)</sup> • 1-year limited technical support for software and initial setup (from date of purchase) <sup>(53)</sup>
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## Software and technology

<b>Help and support</b>	• <b>myHP:</b> Customize, optimize, and secure your device with tips and tricks and easy-to-access settings, and receive helpful messages and information to keep things running smoothly. • <b>HP Support Assistant:</b> Included with your computer, this free self-help tool makes it easier than ever to get help with your HP PC and printers. <sup>(56)</sup>
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<b>Security and protection</b>	• <b>HP BIOS Protection:</b> Get peace of mind knowing your PC BIOS is protected. HP BIOS Protection automatically checks its health and recovers itself. <sup>(23)</sup>
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<b>Partner offers</b>	• <b>Adobe Offer:</b> Get a complimentary 1 month trial of the best creativity and productivity apps from Adobe with the purchase of a computer from HP. Create anything you can imagine – photos, videos, graphics, webpages, PDFs, and more. Get started with the app that best fits your need. <sup>(88a)</sup> • <b>McAfee 30-day trial:</b> Secure your privacy and data when browsing on public Wi-Fi with VPN, included in your free McAfee 30-day trial. <sup>(89b)</sup> • <b>Dropbox cloud storage:</b> Store and synchronize your content online with Dropbox. Get 100GB of storage for 90 days to access, manage, and share your photos, music, and files from anywhere with Internet access. <sup>(90)(22)</sup> • <b>Xbox Game Pass Premium 2 month trial:</b> Enjoy 2 months of Xbox Game Pass Premium. Free with your new HP Laptop. <sup>(60)</sup>
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<b>System performance</b>	• <b>HP Connection Optimizer:</b> Get consistent and reliable Wi-Fi performance with software that automatically switches between the most efficient wireless access points. <sup>(9)</sup>
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<b>Work and lifestyle</b>	• <b>Microsoft Copilot:</b> Microsoft Copilot gives you intelligent answers. Access with just the touch of the Copilot key. <sup>(41)</sup> • <b>Otter.ai:</b> With Otter.ai, an AI assistant can record audio, write notes, automatically capture slides, record, transcribe, and generate meeting summaries so that you can save time and stay organized.
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<b>Gaming and entertainment</b>	• <b>OMEN AI:</b> Provides personalized settings recommendations to achieve the best possible FPS with minimum hassle. • <b>DTS: X® Ultra technology:</b> By producing authentic, spatially accurate 3D sound, this technology gives games, movies, and music a level of depth and immersion for the best entertainment experience possible. • <b>OMEN Gaming Hub:</b> Your one place for everything to make your gaming experience better. From software enhancements to hardware control, and live services, OMEN Gaming Hub elevates play in an easy and simple way.
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## Additional information

<b>Product number</b>	• BP1Q1UA#ABA
<b>Ad embargo date</b>	• 06/13/2025
<b>UPC Code</b>	• 199251373657
<b>Country of origin</b>	• China, Thailand
<b>Pallet information</b>	• <b>Dimensions:</b> 47.24 in (L) x 39.37 in (W) x 42.53 in (H) • <b>Total weight:</b> 668.5 lb • <b>Layers:</b> 3 • <b>Products per layer:</b> 30

