ProductSheet

OMEN Gaming Laptop 16-ap0014nw (C6RQ7EA)

Bold performance that doesn't burn out

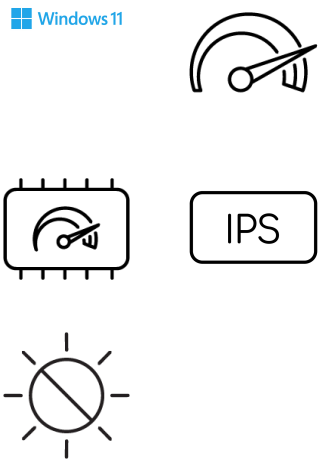
The new OMEN 16 not only has the power of the latest next-gen AMD[1] and NVIDIA® components, but it also has the proper thermal innovations to keep them from burning out. Pair that with OMEN AI for maximum possible FPS at the click of a button and Unleashed Mode for that extra boost in performance, and you have our most reliably powerful laptop yet.

Cooling that keeps up
Handle the heat with high efficiency fans that reduce noise and keeps your laptop cool while you game on.

Instantly raise your game
Get maximum possible FPS with OMEN AI and boost your power beyond its base limits with Unleashed Mode.

Next generation of performance
Get the best possible performance with the latest next-gen NVIDA® GPUs and AMD Processors[1].

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. [4]

AMD Ryzen™ AI 300 Series processors with AMD Radeon™ graphics
Unlock transformational AI PC experiences with AMD Ryzen™ AI 300 series processors. Designed for users to experience pure speed, responsiveness, and power efficient AI processing for Copilot+ PCs. [5]

AMD FreeSync™ technology
See and feel the difference of fluid, responsive gameplay. By synchronizing the refresh rate with your GPU, AMD FreeSync™ makes display stutter, input lag, and screen tears ancient history. [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. [2]

Anti-glare panel
Enjoy the sun and your favorite content with this anti-glare panel. Non-reflective and low gloss means you'll get less glare while you're outside.

Specifications

Operating system	Windows 11 Home
Product color	Shadow black, black chrome logo
Product design	Paint finish
Processor family	AMD Ryzen™ AI 5 processor
Processor	AMD Ryzen™ AI 5 340 (up to 4.8 GHz max boost clock, 16 MB L3 cache, 6 cores, 12 threads)[6,7]
Chipset	AMD integrated SoC
Memory	16 GB DDR5-5600 MT/s (2 x 8 GB)
Internal Storage	1 TB PCIe® Gen4 NVMe™ M.2 SSD
Display	40.6 cm (16") diagonal, 2K (1920 x 1200), 60-144 Hz, IPS, micro-edge, anti-glare, 300 nits, 62.5% sRGB
Screen-to-body ratio (without speakers)	87.49%[18]
Audio	Dual speakers; HP Audio Boost; HyperX; DTS:X Ultra™
Dimensions (W x D x H)	35.75 x 26.9 x 2.37 cm (front); 35.75 x 26.9 x 2.54 cm (rear)
Dimensions (W x D x H)	14.07 x 10.59 x 0.94 in (front); 14.07 x 10.59 x 1 in (rear)
Weight	2.44 kg
Weight	5.4 lb
Package dimensions (W x D x H)	6.3 x 56.7 x 30.5 cm
Package weight	3.19 kg
Package weight	7.05 lb
Keyboard	Full-size, 4-zone RGB backlit, shadow black keyboard with numeric keypad and 26-Key Rollover Anti-Ghosting Key technology
Pointing device	HP Imagepad
Input devices	IR thermal sensor
Camera	HP True Vision 1080p FHD camera with temporal noise reduction and integrated dual array digital microphones
Ports	1 USB Type-A 10Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 1 AC smart pin; 1 HDMI 2.1; 1 headphone/microphone combo; 1 RJ-45; 1 USB Type-C® 10Gbps signaling rate (USB Power Delivery 3.0, DisplayPort™ 1.4, HP Sleep and Charge)[19,42]
Expansion slots	2 M.2 (SSD)[51]
Network interface	Integrated 10/100/1000 GbE LAN
Wireless	MediaTek Wi-Fi 6E MT7922 (2x2) and Bluetooth® 5.3 wireless card
Power supply type	230 W AC power adapter
Battery type	4-cell, 70 Wh Li-ion polymer *([23])*
Battery recharge time	Supports battery fast charge: approximately 50% in 30 minutes[5]
Energy star certified	ENERGY STAR® certified
Special features	AMD FreeSync™[29]
Sustainability specifications	Ocean-bound plastic in bezel; Keyboard keycaps, scissors and keyboard plate contain post-consumer recycled plastic
Security management	Camera privacy shutter; Trusted Platform Module (Firmware TPM) support
Software included	1-month Adobe free trial offer; PC Game Pass 3-month trial
Software - Productivity & finance	1 month trial for new Microsoft 365 customers[24]
HP apps	HP Support Assistant; HP Connection Optimizer; OMEN Gaming Hub
Cloud service	100 GB Dropbox storage for 3 months[1]
UPC number	199642084377
Manufacturer Warranty	2 year (2/2/0) limited warranty includes 2 years of parts and labor. No on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply.

Top Recommended Displays, Accessories and Services

No Top Recommended Displays, Accessories and Services

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.

[4] 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.

[5] 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. Features and software that require a NPU may require software purchase, subscription or enablement by a software or platform provider, and third party software may have specific configuration or compatibility requirements. Potential NPU inferencing performance varies by use, configuration, and other factors. Copilot+ in Windows requires Windows 11. Some features require an NPU. Timing of feature delivery and availability varies by market and device. Requires Microsoft account to log in. Where Microsoft in Windows is not available, the Copilot key will lead to the Bing search engine. See aka.ms/copilotpluspcs.

[6] FreeSync™ is only available when it is connected on Display Port or HDMI port. FreeSync™ is an AMD technology enabled on FHD or QHD displays and is designed to eliminate stuttering and/or tearing in games and videos by locking a display's refresh rate to the frame rate of the graphics card. Monitor, AMD Radeon™ Graphics and/or AMD A-Series APU compliant with DisplayPort™ Adaptive-Sync required. AMD Catalyst™ 15.2 Beta (or newer) required. Adaptive refresh rates vary by display.

Technical Specifications Footnotes

[1] 100 GB of free Dropbox storage for 3 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.

[5] 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 http://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. Available on select HP products.

[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.

[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.

[24] Must activate within 180 days of Windows activation.

[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.

[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.

[51] Second SSD limited to PCIe Gen 4x2 speed.

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