ProductSheet

OMEN Gaming Laptop 16-ap0008la (C2DA1LA)

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

Windows 11

IPS

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]

This Changes Everything
Welcome to the new era of performance. AMD Ryzen 8000 Series ushers in the speed for gamers and creators with the power to tackle any game or workflow. An advanced processor for everyone that extends AMD performance to power your PC. [5]

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.

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]

Specifications

Operating System Software	Windows 11 Home Single Language
Product Color Description (fixed)	Shadow black, black chrome logo
Product Design	Paint finish
Processor Family	AMD Ryzen™ 9 processor
Processor Name	AMD Ryzen™ 9 8940HX (up to 5.3 GHz max boost clock, 64 MB L3 cache, 16 cores, 32 threads)[6,7]
Chipset	AMD integrated SoC
Standard Memory Description 01	24 GB DDR5-5200 MT/s (2 x 12 GB)
Hard Drive Description (01)	1 TB PCIe® Gen4 NVMe™ M.2 SSD
Graphics Card Segment 01	Integrated
GScardseg 01 Available Card 01	AMD Radeon™ 610M Graphics
Display Description (metric)	40.6 cm (16") diagonal, 2K (1920 x 1200), 60-144 Hz, IPS, micro-edge, anti-glare, 300 nits, 62.5% sRGB
Display Description	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 Features	DTS:X® Ultra; Dual speakers; HP Audio Boost; HyperX
Product Dimensions (metric)	35.75 x 26.9 x 2.54 cm (rear); 35.75 x 26.9 x 2.61 cm (front)
Product Dimensions (imperial)	14.07 x 10.59 x 1 in (rear); 14.07 x 10.59 x 1.03 in (front)
Weight (metric)	2.45 kg
Weight (imperial)	5.42 lb
Package Dimensions (metric)	6.3 x 56.7 x 30.5 cm
Package Dimensions (imperial)	2.48 x 22.32 x 12 in
Package Weight (metric)	3.19 kg
Package Weight (imperial)	7.05 lb
Keyboard	Full-size, 1-zone backlit, shadow black keyboard with numeric keypad and 26-Key Rollover Anti-Ghosting Key technology
Pointing Device	HP Imagepad
Sensors	IR thermal sensor
Camera	HP True Vision 1080p FHD camera with temporal noise reduction and integrated dual array digital microphones
External I/O 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 Technologies	Realtek Wi-Fi 6 (2x2) and Bluetooth® 5.4 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]
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	McAfee Online Protection 30-day trial
Software - Productivity & Finance	1 month trial for new Microsoft 365 customers[24,50]
Cloud Service	100 GB Dropbox storage for 3 months[1]
UPC Number	199485313863

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] AMD Ryzen 8000 Series ushers in the speed for gamers and creators with the power to tackle anything.

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

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.

[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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