

OMEN MAX by HP Laptop 16-ah0012nb(B9EY3EA#UUG)

OMEN MAX by HP Laptop 16-ah0012nb - Intel Core Ultra 9 - 275HX / up to 5.4 GHz - Win 11 Home - GeForce RTX 5080 - 32 GB RAM - 1 TB SSD NVMe, Performance - 16" IPS 2560 x 1600 (WQXGA) @ 240 Hz - Gigabit Ethernet - Wi-Fi 7, Bluetooth - shadow black - kbd: Belgium



Experience immersive gaming and productivity with the OMEN MAX by HP Laptop. Featuring a 16-inch Full HD display with a resolution of 2560 x 1600, enjoy vibrant visuals enhanced by anti-glare properties and Low Blue Light technology. The IPS technology ensures that colors remain vivid from any viewing angle, ideal for both gaming and professional applications. With a response time of 3 ms and a refresh rate of 240 Hz, this laptop provides a smooth experience.

Equipped with advanced audio capabilities, the dual array microphones and dual stereo speakers, along with DTS:X Ultra and HP Audio Boost, provide an immersive sound experience. The Intel Core Ultra 9 processor with 24 cores and a maximum turbo speed of 5.4 GHz, paired with 32 GB DDR5 RAM and a 1 TB NVMe SSD, ensures that multitasking and gaming are seamless. Leverage the power of NVIDIA GeForce RTX 5080 graphics for high-performance gaming and creative applications, while features like HP Fast Charge and a lightweight chassis keep you productive on the go.

Key Selling Points

- 16-inch Full HD display with 2560 x 1600 resolution
- Intel Core Ultra 9 processor with 24 cores
- NVIDIA GeForce RTX 5080 graphics for enhanced performance
- HP Audio Boost with DTS:X Ultra for immersive sound
- Fast charging capability to minimize downtime

Product Features

Stunning display

The 16-inch display features a native resolution of 2560 x 1600 and a brightness of 500 cd/m2, providing vibrant and clear visuals for all types of content. With a 240 Hz refresh rate and 3 ms response time, it ensures smooth performance and fluid gameplay.

Powerful performance

Powered by an Intel Core Ultra 9 processor, this laptop boasts 24 cores and a maximum turbo speed of 5.4 GHz, offering exceptional performance for gaming and multitasking. The 32 GB of DDR5 RAM ensures that multiple applications can run smoothly without lag.

Advanced audio technology

The dual stereo speakers and dual array microphones provide a high-quality audio experience, while features like DTS:X Ultra and HP Audio Boost enhance sound clarity for gaming and media consumption.

High storage capacity

With a 1 TB PCIe NVMe SSD, this laptop delivers rapid storage speeds for quick access to files and applications, ensuring efficient performance during both gaming and productivity tasks.

Gaming focused features

Features like NVIDIA G-SYNC and Advanced Optimus technology improve the graphics experience, while the anti-ghosting keyboard with RGB backlighting provides gamers with a responsive and customizable interface.

Main Specifications

Product Description	OMEN MAX by HP Laptop 16-ah0012nb - 16" - Intel Core Ultra 9 - 275HX - 32 GB RAM - 1 TB SSD - Belgium
Product Type	Notebook
Operating System	Win 11 Home - Dutch / English / French / German
Processor	Intel Core Ultra 9 (Series 2) - 275HX up to 5.4 GHz / 36 MB Cache
Neural Processor Unit (NPU)	Intel AI Boost - up to 13 TOPS
Memory	32 GB DDR5 (2 x 16 GB)
Storage	1 TB SSD - NVMe, Performance
Display	16" 2560 x 1600 / WQXGA @ 240 Hz
Graphics	NVIDIA GeForce RTX 5080 / Intel Graphics - up to 8 TOPS
Video Memory	16 GB GDDR7 SDRAM

Gaming	Yes
Input Device	Imagepad
Keyboard	Belgium
Keyboard Backlight	Yes (RGB)
Numeric Keypad	Yes
Integrated Webcam	Yes
Networking	802.11a/b/g/n/ac/ax/be, Bluetooth 5.4, Gigabit Ethernet
Battery	6-cell
Features	IR thermal sensor
Colour	Shadow black
Dimensions (WxDxH)	35.65 cm x 26.9 cm x 2.78 cm
Weight	2.68 kg
Localisation	Language: Dutch, French / region: Belgium
Manufacturer Warranty	Limited warranty - parts and labour - 2 years

Extended Specification

General

Product Type	Notebook
Operating System	Windows 11 Home - Dutch / English / French / German

Memory

RAM	32 GB (2 x 16 GB)
Technology	DDR5 SDRAM
Speed	2800 MHz
Rated Speed	2800 MHz
Form Factor	SO-DIMM 262-pin
Slots Qty	2
Empty Slots	0

Manufacturer Warranty

Service & Support	Limited warranty - parts and labour - 2 years
-------------------	---

Storage

Main Storage	1 TB SSD M.2 PCIe 5.0 - NVMe Express (NVMe), Performance
--------------	--

Miscellaneous

Colour	Shadow black
Surface Finish	Sandblasted and paint finish
Integrated Options	IR thermal sensor
Features	HP Fast Charge, TPM support
Included Accessories	HP 330W AC Adapter
Localization	Language: Dutch, French / region: Belgium

Software

Software Included	HP Support Assistant, HP Connection Optimizer, HP OMEN Gaming Hub, Adobe (1 month trial), Xbox Game Pass (1 month trial), PC Game Pass (3 months trial), Microsoft 365 (1 month trial), McAfee Online Protection (30 days trial), Dropbox (25 GB Cloud Storage) (free for 1 year)
-------------------	---

Display

Type	16" - IPS
Resolution	2560 x 1600 (WQXGA)
V-Sync Rate at Max Res.	240 Hz
Widescreen	Yes
Image Aspect Ratio	16:10
Image Brightness	500 cd/m²
Colour Gamut	100% sRGB
Features	Flicker Free technology, 3 ms response rate, anti-glare, Micro Edge, Low Blue Light technology, 88.81% screen-to-body ratio (without speakers)

Battery

Technology	6-cell lithium polymer
Capacity	83 Wh

Communications

Wireless	802.11a/b/g/n/ac/ax/be, Bluetooth 5.4
Wireless Controller	Intel WI-FI 7 BE200
Network Interface	Gigabit Ethernet
Features	Dual stream (2x2), HP Extended Range Wireless LAN

Dimensions & Weight

Dimensions (WxDxH)	35.65 cm x 26.9 cm x 2.78 cm
Weight	2.68 kg
Shipping Dimensions (WxDxH) / Weight	9.4 cm x 42.8 cm x 33.2 cm / 4.74 kg

Processor / Chipset

CPU	Intel Core Ultra 9 (Series 2) 275HX
Max Turbo Speed	5.4 GHz
Number of Cores	24-core
Performance Cores	8
Efficient Cores	16
Cache	L3 - 36 MB
Chipset	Intel HM870
Features	Intel Turbo Boost Technology

Audio & Video

Multi-GPU Configuration	1 single GPU card / integrated GPU
Graphics Processor	NVIDIA GeForce RTX 5080 / Intel Graphics - up to 8 TOPS
Video Memory	16 GB GDDR7 SDRAM
Video System Features	NVIDIA G-SYNC, Advanced Optimus
Gaming	Yes
Camera	Yes - Full HD
Video Resolutions	1080p
Camera Features	HP TrueVision, privacy shutter, Temporal Noise Reduction, IR camera
Sound	Dual stereo speakers, dual array microphone
Compliant Standards	DTS:X Ultra
Audio Features	Output: HP Audio Boost, HyperX Audio

Input

Type	Keyboard, imagepad
Keyboard Backlight	Yes (RGB)
Keyboard Layout	Belgium
Numeric Keypad	Yes
Features	NKRO Anti-Ghosting Key technology, anti-ghosting

AC Adapter

Output	330 Watt
--------	----------

Connections & Expansion

Interfaces Details	2 x USB4 (supports Thunderbolt 4, DisplayPort 1.4 Alt Mode) (Power Delivery, Sleep & Charge) USB 3.2 Gen 2 (Sleep & Charge) USB 3.2 Gen 2 HDMI LAN (RJ-45) Headphone/microphone combo jack
--------------------	--

Sustainability Information

Product Recycled Content	Post-consumer recycled plastic, ocean-bound plastics, recycled metal
--------------------------	--

Neural Processor Unit (NPU)

Neural Processor Unit (NPU)	Intel AI Boost
NPU Performance Up To (TOPS)	13 TOPS
Total Processor Performance Up To (TOPS)	36 TOPS
Sparsity Support	Yes
AI Software Frameworks Supported by NPU	OpenVINO, WindowsML, DirectML, ONNX RT, WebNN
Windows Studio Effects Support	Yes

What's in the box

OMEN MAX by HP Laptop 16-ah0012nb
HP 330W AC Adapter

*TD SYNnex is not responsible for errors in the documentation of products.