ProductSheet

OMEN Gaming Laptop 16-am0001ns (BP4C1EA)

Bold performance without the burnout

The new OMEN 16 not only has the power of the latest next-gen Intel®[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 Intel® Processors[1].

Featuring

Intel® Core™ Processors
Boost your mobile productivity with Intel® Core™ Processors, featuring a performance hybrid architecture that makes it easy to game, stream, and create at the same time. [1]

NVIDIA® G-SYNC™
By synchronizing the refresh rates of your GPU and display, NVIDIA® G-SYNC™ technology delivers gameplay that's sharp, fluid, and stutter-free with minimal input lag.

165Hz Display
Reduce frustrating lag and image ghosting with a 165Hz display. [4]

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. [5]

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. [4]

Specifications

Operating system	FreeDOS 3.0
Product color	Shadow black, black chrome logo
Product design	Paint finish
Processor family	Intel® Core™ 7 processor
Processor	Intel® Core™ 7 240H (up to 5.2 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 10 cores, 16 threads)[6,7]
Chipset	Intel® integrated SoC
Memory	32 GB DDR5-5600 MT/s (2 x 16 GB)
Internal Storage	1 TB PCIe® Gen4 NVMe™ M.2 SSD
Display	40.6 cm (16") diagonal, 2K (1920 x 1200), 60-165 Hz, 3 ms response time, IPS, micro-edge, anti-glare, Low Blue Light, 400 nits, 100% sRGB
Display	16" diagonal, 2K (1920 x 1200), 60-165 Hz, 3 ms response time, IPS, micro-edge, anti-glare, Low Blue Light, 400 nits, 100% sRGB[17,21,28]
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)
Weight	2.43 kg
Package dimensions (W x D x H)	6.3 x 56.7 x 30.5 cm
Package weight	3.77 kg
Keyboard	Full-size, 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)
Network interface	Integrated 10/100/1000 GbE LAN
Wireless	Realtek Wi-Fi 6 (2x2) and Bluetooth® 5.4 wireless card[11,12,13,46]
Power supply type	230 W AC power adapter
Battery type	6-cell, 83 Wh Li-ion polymer *([23])*
Battery recharge time	Supports battery fast charge: approximately 50% in 30 minutes[5]
Special features	NVIDIA® G-SYNC® support
Sustainability specifications	Ocean-bound plastic in speaker enclosure(s) and bezel; Keyboard keycaps and scissors contain post-consumer recycled plastic
Security management	Camera privacy shutter; Trusted Platform Module (Firmware TPM) support
UPC number	199251386145
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.

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. Intel's numbering is not a measurement of higher performance.

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

[5] All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. Eyesafe® Display for Low Blue Light is the Display Compliance Test Specification quality. See https://eyesafe.com for more details. Display measured diagonally

Technical Specifications Footnotes

[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. Intel's numbering, branding and/or naming is not a measurement of higher performance.

[7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost/ for more information.

[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.

[28] Eyesafe® Display for Low Blue Light is the Display Compliance Test Specification quality. See https://eyesafe.com for more details.

[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.

[46] Bluetooth® 5.4 operation requires Microsoft OS/Chrome OS support. Until Microsoft OS/Chrome OS support is available, Bluetooth® 5.4 will function as Bluetooth® 5.3 or lower.

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