OMEN by HP Laptop 16-c0009nj (4T9M1EA)

Overview

Play yourself up

Go beyond with the OMEN by HP 16.1 inch Gaming Laptop. Powered by an AMD processor[1] and mighty graphics, play at your best from anywhere. Expand your gaming world with sharper and smoother visual experiences courtesy of a high resolution and a fast refresh rate display. Stay cool under pressure with OMEN Tempest Cooling Technology[2] that prevents overheating even when your game heats up.

Stay cool under pressure

With 3-sided venting and 5-way airflow, OMEN Tempest Cooling Technology[2] prevents overheating even when your game heats up.

Customize with OMEN Gaming Hub

Your one-stop shop to elevate gameplay, from controlling every little performance to lighting options and more.

Fast refresh rate during gaming

Play at your best with tear-free gameplay at a fast refresh rate and eliminate screen flickering with HP Flicker-free.[3]

Features

Get a fresh perspective

Windows 11 provides a calm and creative space where you can pursue your passions through a fresh experience. 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™ 5000 H-Series Mobile Processors

Now you can enjoy elite gaming performance on a thin and light notebook with amazing battery life, thanks to the new AMD Ryzen™ 5000 H-Series Mobile Processors. Never compromise on your gaming laptop again.[1]

The Ultimate Play

The GeForce RTX™ 3070 is powered by Ampere— NVIDIA's 2nd gen RTX architecture. Built with enhanced RT Cores and Tensor Cores, new streaming multiprocessors, and high-speed G6 memory, it gives you the power you need to rip through the most demanding games.[5]

QHD IPS antiglare display

Get lost in the captivating QHD resolution with IPS technology. Coupled with an antiglare screen to reduce light reflection, this display provides a remarkable entertainment experience.[6]

HP QuickDrop

Wirelessly transfer photos, videos, documents and more between your PC and mobile device.

DTS: X® Ultra Technology

By producing authentic, spatially accurate 3D sound through any headset, this technology offers specially tuned audio modes for different game types to provide immersion for the best entertainment experience possible.[7]

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[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] Thermal solution varies by configuration.

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

[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] ©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.

[6] Quad high-definition (QHD) content is required to view QHD images.

[7] Listening to personal stereo equipment at full volume for long periods can damage the user's hearing. To reduce the risk of hearing damage, lower the volume and amount of time listening at full volume.

Specifications

Operating system	Windows 11 Home[38]
Product color	Mica silver cover and base, mica silver aluminum keyboard frame
Processor family	AMD Ryzen™ 9 processor
Processor	AMD Ryzen™ 9 5900HX (up to 4.6 GHz max boost clock, 16 MB L3 cache, 8 cores, 16 threads)[6,7]
Chipset	AMD Integrated SoC
Memory	32 GB DDR4-3200 MHz RAM (2 x 16 GB)
Internal Storage	1 TB PCIe® NVMe™ TLC M.2 SSD
Product design	Paint finish cover and base, sandblasted keyboard frame
Display	40.9 cm (16.1") diagonal, QHD (2560 x 1440), 165 Hz, 3 ms response time, IPS, micro-edge, anti-glare, Low Blue Light, 300 nits, 100% sRGB
Display size (diagonal)	40.9 cm (16.1")
Audio	Audio by Bang & Olufsen; DTS:X® Ultra; Dual speakers; HP Audio Boost
Minimum dimensions (W x D x H)	36.92 x 24.8 x 2.3 cm *(Dimensions vary by configuration)*
Weight	2.31 kg *(Weight varies by configuration)*
Keyboard	Full-size, 4-zone RGB backlit, mica silver keyboard and 26-Key Rollover Anti-Ghosting Key technology
Pointing device	HP Imagepad with multi-touch gesture support; Precision Touchpad support
Input devices	IR Thermal sensor
Camera	HP Wide Vision 720p HD camera with integrated dual array digital microphones
Ports	1 SuperSpeed USB Type-C® 10Gbps signaling rate (DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 2 SuperSpeed USB Type-A 5Gbps signaling rate; 1 HDMI 2.1; 1 RJ-45; 1 AC smart pin; 1 headphone/microphone combo[19]
Expansion slots	1 multi-format SD media card reader
Package dimensions (W x D x H)	6.9 x 55.2 x 34.5 cm
Package weight	3.93 kg
Network interface	Integrated 10/100/1000 GbE LAN
Wireless	Realtek Wi-Fi 6 (2x2) and Bluetooth® 5.2 wireless card (supporting gigabit data rate)[11,12,13]
Power supply type	230 W AC power adapter
Battery type	4-cell, 70 Wh Li-ion polymer *([23])*

Battery life	Up to 9 hours and 15 minutes[3]
Battery recharge time	Supports battery fast charge: approximately 50% in 45 minutes[5]
Battery weight	0.63 lb
Battery weight	290 g
Ecolabels	EPEAT® registered[27]
Energy star certified	ENERGY STAR® certified
Sustainable impact specifications	Ocean-bound plastic in speaker enclosure(s); Recycled metal in keyboard frame and hinge cap(s); Keyboard keycaps made with post-consumer recycled plastic
Security management	Trusted Platform Module (Firmware TPM) support
Pre-installed software	ExpressVPN (30 day free trial); LastPass Premium (30 day free trial)[22]
Software included	McAfee LiveSafe™
Software – Productivity & finance	1 month trial for new Microsoft 365 customers[24]
Cloud service	25 GB Dropbox storage for 12 months[1]
UPC number	196188287279
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.

Additional specifications

Additional information about HP	http://www.hp.com
Battery capacity	70
Battery capacity uom	Wh
Battery cells number	4
Battery life	Long Life
Battery life video playback	Up to 10 hours and 45 minutes
Battery type	Li-ion polymer
Bluetooth version	Bluetooth® 5.2
Brightness	300 nits
Camera brand	HP Wide Vision
Camera microphone	integrated dual array digital microphones
Camera resolution (vertical)	720p
Camera resolution standard	HD
Color	Mica silver
Color gamut	100% sRGB
Datasheet photo 1	AHID/c6ccae8f63e77bb0ba610841fec9ebd170beed32
Datasheet photo 2	AHID/d1b1424b2e90b0219caa86e88efea3e7c747f032
Datasheet photo 3	AHID/d8de1dc68f945e43c1a214c9a75c8ff0f9ed51af
Datasheet photo 4	AHID/bf1bd7fd08d8123e380631a45ec74d13dd1e624e
Display	40.9 cm (16.1") diagonal QHD display
Display bezel	micro-edge
Display brightness	300
Display brightness uom	nits
Display panel technology	IPS
Display refresh rate	165
Display refresh rate uom	Hz
Display resolution (pixels)	2560 x 1440
Display resolution standard	QHD
Display response time	3
Display response time uom	ms
Display size (diagonal) uom	"
Display size (diagonal, imperial)	16.1
Display size (diagonal, metric)	40.9

Display size (diagonal, metric) uom	cm
Display surface treatment	anti-glare
ECC memory	non-ECC
Graphic card footnote number	[8]
Graphics	Discrete
Graphics (discrete)	NVIDIA® GeForce RTX™ 3070 Laptop GPU (8 GB GDDR6 dedicated)
Graphics card brand	NVIDIA®
Graphics card family	GeForce
Graphics card memory size	8
Graphics card memory size uom	GB
Graphics card memory type	GDDR6
HP apps	HP Audio Switch; HP Connection Optimizer; OMEN Gaming Hub
Keyboard backlight	RGB backlit
Keyboard backlit zone	4-zone
Keyboard color	mica silver
Keyboard size	Full-size
Keyboard technology	26-Key Rollover Anti-Ghosting Key technology
Memory and storage	32 GB memory; 1 TB SSD storage
Memory layout (slots & size)	2 x 16 GB
Memory module type	DIMM
Memory size	32
Memory size uom	GB
Memory speed	3200
Memory speed uom	MHz
Memory type	DDR4
Model Number	RTX™ 3070 with Max-Q design
Number of User-accessible Memory Slots	2
Number of memory slots	2
Package depth, imperial (most common size)	21.73
Package depth, metric (most common size)	55.2
Package height, imperial (most common size)	13.58
Package height, metric (most common size)	34.5

Package weight	8.68 lb
Package width, imperial (most common size)	2.71
Package width, metric (most common size)	6.9
Packaging unit of measure (imperial)	in
Packaging unit of measure (metric)	cm
Playbook TS icon OS	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905482.png
Playbook TS icon battery life	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905264.png
Playbook TS icon connectivity	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201987.png
Playbook TS icon dimensions NB	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08250394.png
Playbook TS icon display NB	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08205649.png
Playbook TS icon graphics	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08169202.png
Playbook TS icon memory	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08267700.png
Playbook TS icon processor	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201972.png
Playbook TS icon storage	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08192819.png
Playbook TS icon weight imperial	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c05790117.png
Playbook TS icon weight metric	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08267650.png
Processor Brand	AMD
Processor cache	16 MB L3
Processor core	8
Processor family	Ryzen™ 9
Processor maximum frequency	4.6
Processor maximum frequency uom	GHz
Processor model	5900HX
Processor threads	16
Product brand name	HP
Product language options	#ABT
Product long name specifications	OMEN by HP Laptop 16-c0009nj, Windows 11 Home, 16.1", AMD Ryzen™ 9, 32GB RAM, 1TB SSD, NVIDIA® GeForce RTX™ 3070 with Max-Q design, QHD, Mica silver
Product long name specifications V2	OMEN by HP Laptop 16, Windows 11 Home, 16.1", AMD Ryzen™ 9, 32GB RAM, 1TB SSD, NVIDIA® GeForce RTX™ 3070 with Max-Q design, QHD, Mica silver
Product short name specifications	OMEN by HP Laptop 16-c0009nj, 16.1", AMD Ryzen™ 9, 32GB RAM, 1TB SSD

Screen-to-body ratio (without speakers)	80.69%[18]
Storage capacity	1
Storage capacity uom 01	TB
Storage form factor 01	M.2
Storage interface 01	PCIe®
Storage interface protocol 01	NVMe™
Storage memory technology 01	TLC
Storage type	SSD
Storage type 01	SSD
Technology logo 1	Publication logos/Artboard_3.jpg
Technology logo 2	Publication logos/AMD RYZEN LOGO.jpg
Technology logo 3	Publication logos/EPEAT_silver_3C11.jpg
Technology logo 4	Publication logos/energy_star_logo.jpg
Technology logo 6	Publication logos/mcafee_logo_with_tag_new.jpg
Touchscreen	No
UNSPSC code	43211503
Wireless antenna	2x2
Wireless standard	Wi-Fi 6E
Wireless supplier	Realtek
Wireless transfer speeds	Supporting Gigabit data rate

[1] 25 GB of free Dropbox storage for 12 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.

[3] Windows MobileMark 18 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 https://bapco.com/products/mobilemark-2018/ for additional details.

[5] Recharges your battery up to 50% within 45 minutes when the system is off (using "shut down" command). Recommended for use with the HP adapter provided with the notebook, not recommended with a smaller capacity battery charger. 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. See http://store.hp.com for a full list of product features.

[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.

[11] Wi-Fi CERTIFIED 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 CERTIFIED 6™ (802.11ax) is backwards compatible with prior 802.11 specs.

[13] Wi-Fi CERTIFIED 6™ (802.11ax) is not supported in Belarus where Wi-Fi settings will be optimized to local regulatory requirements (802.11ac).

[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.

[22] Reverting to LastPass basic after 30 days.

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

[27] Based on U.S. EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit www.epeat.net for more information.

[38] 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

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