



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.

Visually stunning

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

OMEN Gaming Hub

From software enhancements to hardware control, and live services, OMEN Gaming Hub elevates play in an easy and simple way.

Featuring



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]

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. [4]

Effortlessly connected

Enjoy a smoother wireless experience with Wi-Fi 6 (2x2) and Bluetooth® 5.0 combo, all your connections are solid and up to 3x faster file transfer speeds than Wi-Fi 5. [5]

MU-MIMO supported

If you have several MU-MIMO devices in your home, MU-MIMO support works in combination with a MU-MIMO router to maximize network traffic for a smoother online experience.

HP Wide Vision HD Camera

The 88-degree, wide-angle field of view lets you video chat with the entire family or group of friends in crystal clear detail. [6]

SuperSpeed USB Type-A 5Gbps signaling data rate

Plug in your external storage with this SuperSpeed USB Type-A port, featuring 5Gbps signaling data rate. [7]

PCIe SSD storage

Specifications

Operating system	FreeDOS
Product color	Mica silver cover and base, mica silver aluminum keyboard frame
Processor family	AMD Ryzen™ 7 processor
Processor	AMD Ryzen™ 7 5800H (up to 4.4 GHz max boost clock, 16 MBL3 cache, 8 cores, 16 threads) ^[6,7]
Chipset	AMD Integrated SoC
Memory	16 GB DDR4-3200 MHz RAM (2 x 8 GB)
Internal Storage	512 GB PCIe® NVMe™ TLC M.2 SSD
Product design	Paint finish cover and base, sandblasted keyboard frame
Optical drive	Optical drive not included
Graphics	Discrete
Graphics (discrete)	NVIDIA® GeForce RTX™ 3050 Ti Laptop GPU (4 GB GDDR6 dedicated)
Graphics	Integrated
Graphics (integrated)	AMD Radeon™ Graphics
Display	40.9 cm (16.1") diagonal, FHD (1920 x 1080), 144 Hz, IPS, micro-edge, anti-glare, 250 nits, 45% NTSC
Display	16.1" diagonal, FHD (1920 x 1080), 144 Hz, IPS, micro-edge, anti-glare, 250 nits, 45% NTSC
Display size (diagonal)	40.9 cm (16.1")
Display size (diagonal)	16.1"
Audio features	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 <i>(Dimensions vary by configuration)</i>
Minimum dimensions (W x D x H)	14.53 x 9.65 x 0.91 in
Weight	Starting at 2.3 kg <i>(Weight varies by configuration)</i>
Weight	Starting at 5.09 lb
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
Webcam	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	Intel® Wi-Fi 6E AX210 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)
Power supply type	200 W Smart AC power adapter
Battery type	6-cell, 83 Wh Li-ion polymer
Battery life	Up to 9 hours and 30 minutes ^[3]
Battery recharge time	Supports battery fast charge: approximately 50% in 45 minutes ^[5]
Battery weight	0.69 lb
Battery weight	315 g
Sustainable impact specifications	Ocean-bound plastic in speaker enclosure; Contains recycled metal; Keyboard keycaps made with post-consumer recycled plastic

Top Recommended Displays, Accessories and Services

Cases	
OMEN Transceptor 17 Duffel Bag	7MT82AA

Covers	
OMEN Transceptor 17 Sleeve	3J045AA

Mice	
OMEN by HP Hard Mouse Pad 200	2VP01AA
OMEN by HP Outpost Mousepad	6CM14AA
OMEN by HP Photon Wireless Mouse	6CL96AA
OMEN by HP Mouse Pad 300	1MY15AA
OMEN by HP Reactor Mouse	2VP02AA
OMEN Vector Mouse	8BC53AA
OMEN by HP Mouse Pad 100	1MY14AA

Keyboards	
OMEN by HP Sequencer Keyboard	2VN99AA
OMEN by HP Encoder Keyboard	6YW76AA

Headsets	
OMEN Blast Headset	1A858AA

Headphones	
OMEN Dyad Earbuds	8JE67AA

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] Thermal solution varies by configuration.

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

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

[5] Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 (802.11ax) is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other Wi-Fi 6 devices. Only available in countries where 802.11ax is supported. Wi-Fi 6 (802.11ax) is not supported in Ukraine, Russia, and Indonesia where the Wi-Fi 6 (802.11ax) will be disabled and downgraded to 802.11ac by the Intel's DRS solution.

[6] Features may require software or other 3rd party applications to provide the described functionality.

[7] Actual throughput may vary.

[15] 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 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.

[16] Percentage of ocean-bound plastic contained in each component varies by product.

[17] Laptops manufactured with recycled aluminum material in product cover. Percent of recycled aluminum varies by product.

[18] Percentage of post-consumer recycled plastic contained in keycap varies by product.

Technical Specifications Footnotes

[3] Windows 10 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.

[19] For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.

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