

Lift your play up. Way up.

Go beyond with OMEN by HP 16.1 inch Gaming Laptop. Powered by an Intel[®] Core[™] processor¹ and powerful NVIDIA[®] 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 Technology² that prevents overheating even when your game heats up.



*Product image may differ from actual product



Stay cool under pressure With 3-sided venting and 5-way airflow, OMEN Tempest Cooling Technology² prevents overheating even when your game heats up.



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



Customize with OMEN Gaming Hub Your one-stop shop to elevate gameplay, from controlling every little performance to lighting options and more.



Featuring

Windows 10

Do great things confidently with the familiar feel of Windows - only better.⁴

Exceptional experience, anywhere

11th Gen Intel[®] Core[™] processors bring the perfect combination of features to make you unstoppable. Get things done fast with high performance, instant responsiveness and best-in-class connectivity.⁵

The Ultimate Play

The GeForce RTXTM 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.⁶

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.

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.⁷

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. $^{\rm 8}$

Thunderbolt[™] 4 with USB4[™] Type-C[®]

The latest Thunderbolt[™] solution lets you power your device or connect up to two 4K displays with a single cable and blazing 40Gbps signaling rate.

HP QuickDrop

This bridge between your PC and mobile device lets you share mobile content right to your PC with a simple, secure Wi-Fi connection.

ExpressVPN

Hide your IP address and encrypt your network data so no one can see what you're doing. Reduce the threat of hacking even when browsing on public Wi-Fi. 9

McAfee[®] LiveSafe™

Free 12-month subscription of McAfee® LiveSafe™ service included. McAfee® LiveSafe™ service enriches your digital life by protecting your data, identity and all your devices so you can connect with confidence.¹¹

Dual channel memory

With dual channel technology, two channels work simultaneously to double the communication speed between the memory controller and the RAM increasing system performance.

Four Zone RGB keyboard

Allows you to backlight 4 independent zones with different RGB lighting. WASD keys are outlined to highlight key controls. It's all easily controlled through the OMEN Gaming Hub.

Micro-edge display

See more of your screen with a micro-edge display that maximizes your viewing area.

Flicker-free

Using DC Dimming technology, we can eliminate screen flickering for more comfortable viewing. $^{\rm 14}$

HP Fast Charge

When your laptop is low on power, no one has time to wait hours to recharge. Power down your device and go from 0 to 50% charge in approximately 45 minutes. $^{15}\,$

An exceptionally rich audio experience

HP Dual Speakers and audio, custom-tuned in collaboration with experts at Bang & Olufsen, bring entertainment to life with sound you can feel. Awaken your senses with PC audio perfection.

HP Audio Boost

Feel and hear state-of-the-art sound with the next generation of HP Audio Boost and SmartAmp technology—providing louder, richer sound and booming bass performance without distortion.

Elevated aesthetic

Designed with an aluminum-finished palm rest for a premium look.

Thin and light gaming

A small footprint and thin and light design lets you easily take this PC with you for ultraportable gaming.

Thoughtfully designed

Built with the environment in mind, our laptop design includes sustainable materials like ocean-bound plastic in the speaker enclosure.¹⁶

Thoughtfully designed

Built with the environment in mind, our laptop design includes sustainable materials like recycled aluminum. $^{\rm 17}$

Keyboard keycaps contain post-consumer recycled plastic

We're bringing a more sustainable design to our keyboards by using keycaps made with post-consumer recycled plastic.¹⁸



*Product image may differ from actual product

Specifications

Performance

Operating system Windows 10 Home

Device comes with Windows 10 and a free Windows 11 upgrade or may be preloaded with Windows 11. Upgrade timing may vary by device. Features and app availability may vary by region. Certain features require specific hardware (see Windows 11 Specifications)

Processor

Intel® Core™ i7-11800H (up to 4.6 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 8 cores, 16 threads)^{6,}

Processor family: 11th Generation Intel[®] Core™ i7 processor

Chipset Intel® HM570

Memory

32 GB DDR4-3200 MHz RAM (2 x 16 GB) Transfer rates up to 3200 MT/s Number of User-accessible Memory Slots: 2

Storage 1 TB PCIe[®] NVMe[™] TLC M.2 SSD 1 TB PCIe[®] NVMe[™] TLC M.2 SSD RAID 0 configured Optical drive not included

25 GB Dropbox storage for 12 months¹ Graphics

Discrete: NVIDIA[®] GeForce RTX[™] 3070 Laptop GPU (8 GB GDDR6 dedicated) ⁸; NVIDIA® Max-Q technology

Audio Audio by Bang & Olufsen; DTS:X[®] Ultra; Dual speakers; HP Audio Boost

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^{17,21,28} Screen-to-body ratio

80.69% Power 230 W AC power adapter; Battery type

4-cell, 70 Wh Li-ion polymer²³ 290 q

Battery and Power

Up to 5 hours and 30 minutes³; Supports battery fast charge: approximately 50% in 45 minutes⁵

Maximum battery life video playback Up to 6 hours and 30 minutes

Connectivity

Network interface Integrated 10/100/1000 GbE LAN

Wireless connectivity Intel® Wir-Fi 6 AX201 (2x2) and Bluetooth® 5 combo (Supporting Gigabit data rate) ^{11,12,13} MU-MIMO supported; Miracast® compatible

Ports

1 Thunderbolt™ 4 with USB4™ Type-C[®] 40Gbps signaling rate (USB Power Delivery, 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; 1 mini DisplayPort^{™19,20}

Expansion slots

1 multi-format SD media card reader

Webcam

HP Wide Vision 720p HD camera with integrated dual array digital microphones





Design

Product color

Shadow black cover and base, shadow black aluminum keyboard frame Paint finish cover and base, sandblasted keyboard frame

Software

HP apps

HP Audio Switch; HP Connection Optimizer; HP QuickDrop; OMEN Gaming Hub Software ExpressVPN (30 day free trial); LastPass Premium (30 day free trial)²²;

1 month trial for new Microsoft 365 customers² Service & support McAfee LiveSafe

Additional information

Part Number P/N: 4T9L6EA #ABT

UPC/EAN code: 196188287200 Ecolabels

EPEAT[®] registered ²⁷ ENERGY STAR® certified

Sustainable impact specifications: Ocean-bound plastic in speaker enclosure; Contains recycled metal; Keyboard keycaps made with post-consumer recycled plastic ^{39,40,41}

Weight

2.31 kg

Packed: 4.01 kg Weight Note: Weight varies by configuration

Dimensions 36.92 x 24.8 x 2.3 cm; Packed: 6.9 x 55.2 x 34.5 cm

Dimension Note: Dimensions vary by configuration

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.

Kevboard

Full-size, 4-zone RGB backlit, shadow black keyboard and 26-Key Rollover Anti-Ghosting Key technology

HP Imagepad with multi-touch gesture support; Precision Touchpad Support

Features Support NVIDIA® G-SYNC® technology Security management Fingerprint reader not available

Sensors IR Thermal sensor

Recommended accessories

* Not included









OMEN by HP Photon Wireless Mouse 6CI 96AA

Key Selling Points 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, branding and/or naming is not a measurement of higher performance Thermal solution varies by configuration.

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

Feature Messaging Footnotes

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 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.microsoft.com.
⁵ 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. ⁶ ©2021 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. ⁷ Quad high-definition (QHD) content is required to view QHD images.

⁹ Free 30-day trial, switch to a paid service at the end of the trial period. Each paid subscription grants you one (1) license to use on three (3) different devices at any given time. See www.expressvpn.com for more details.
¹¹ Internet service required and not included. Subscription required after the 12 month.
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¹⁴ The Flicker-free capability eliminates screen flicking through integrating DC-dimming LED backlights. 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

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-² Free 1 -year subscription of McAfee LiveSafe service included.

⁶ Free 1-year subscription of McAree LiveSate service included. Internet access required and not included. Subscription required after expiration.
 ⁸ 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, software and overall system configuration. See http://www.intel.com/technology/turbobost/ for more information.
 ⁷ Intel® Turbo Boost performance varies depending on hardware, software and overall System configuration. See http://www.intel.com/technology/turbobost/ for more information.

¹⁰ PUDD Boots performance varies depending on narware, software and overall system coninguration. See http://www.intet.com/tet.indogy/turbubods/ for more information.
⁸ NVIDIA® Max-Q Design can help reduce system heat and noise in thinner form factor PCs. Form factor design and thickness of the system will vary. Overall graphics performance may be lower than alternative graphics solutions that do not utilize Max-Q design.
¹⁰ Battery life tested by HP using continuous FHD video playback, 1080p (1920x1080) resolution, 150 nits brightness, system audio level at 17%, player audio level at 100%, played full-screen from local storage, headphone attached, wireless on but not connected. Actual battery life will vary depending on configuration and maximum capacity will naturally decrease with time and usage.
¹¹ Wi-Fi CERTIFIED 6TM 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 points limited. Wi-Fi CERTIFIED 6™ (802.11ax) is backwards compatible with prior 802.11 specs.

¹³ Wh-Fi CERTIFIED 5^w (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 ²⁰ SuperSpeed USB 20Gbps is not available.

 ⁴⁰ Superspecto USB 2000ps is not available.
 ²¹ TVU Low Blue Light is the Display Compliance Test Specification quality. See https://www.certipedia.com/?locale=en#search for more details.
 ²² Reverting to LastPass basic after 30 days.
 ²³ Actual battery Watt-hours (Wh) will vary from design capacity. Battery capacity will naturally decrease with shelf life, time, usage, environment, temperature, system configuration, loaded apps, features, power management settings and other factors. ²⁴ Must activate within 180 days of Windows activation

¹⁴ Must activate within 180 days or windows activation.
²⁷ Bused on U.S. EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit www.epeat.net for more information.
²⁸ Eyesafe® Display for Low Blue Light is the Display Compliance Test Specification quality. See https://eyesafe.com for more details.

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 ³⁹ Percentage of ocean-bound plastic contained in each component varies by product. ⁴⁰ Percentage of recycled metal varies by product.

⁴¹ Keyboard keycap contains post-consumer recycled plastic. Percentage of Post consumer recycled contained in each component varies by product.

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