OMEN 16L Gaming Desktop PC TG03-1002na PC

Your new era of gaming

Step into your gaming era with the OMEN 16L. Powered by an Intel® processor [1] and high-performance graphics card, it delivers elevated performance in a compact form. Great for unwinding after a busy day or gaming during your downtime.



*Product image may differ from actual product

Get set for gaming greatness

Enjoy smoother gameplay and enhanced cooling with CPU fans, boosting airflow and featuring customizable lighting.

Compact size, big plays

Refresh your space with a stylish, compact design that's perfect for relaxing and gaming.

Built to Last

Stay on the cutting edge of performance with easily upgradeable components, like your RAM and SSD.

Sustainability in action

Sustainability in action

Innovating with purpose and intention[2,3], to make an impact to drive positive, lasting change [4,5].

with OMEN McAfee™ NVIDIA GEFORCE RTX

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Featuring

Get a fresh perspective
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.[6]

For every gamer, everywhere
Newly improved performance hybrid architecture will push your gaming experience beyond expectations. Intel® Core processors feature performance hybrid architecture that makes it easy to game, stream, and create at the same time[7]

Game Changer
Powered by NVIDIA Blackwell, GeForce RTX™ 50 Ti Series GPUs bring game-changing AI capabilities to gamers and creators. Multiply performance with NVIDIA DLSS 4, generate images at unprecedented speed, and unleash your creativity with NVIDIA Studio.[8]

1TB PCIe® Gen4 NVMe™ M.2 SSD
With high-speed data transfer, the 1 TB PCIe Gen4 NVMe M.2 SSD offers lightning fast speed and efficient storage.[9]

USB Type-C® 10Gbps signaling data rate
Plug in your external storage with this USB Type-C® port, featuring 10Gbps signaling data rate. And it's reversible, so you never have to worry about plugging in upside down.[10]

Ethernet port
When you have a spotty wireless connection, you can quickly plug in your Ethernet cable to get a smooth, wired Internet experience that bypasses any wireless issue.

Xbox Game Pass Premium 2-month trial
Enjoy 2 months of Xbox Game Pass Premium. Free with your new HP device. Access a library of legendary, high-quality games, get exclusive in-game perks, partner discounts, and earn points annually with Xbox Rewards.[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.

Effortlessly connected
Enjoy ultra-fast gigabit data rate with a Wi-Fi 6 (2x2) and Bluetooth® 5.3 combo[12]

OMEN Gaming Hub
OMEN Gaming Hub is your one place for everything to make your gaming experience better. From software enhancements to hardware control, and live services, OMEN Gaming Hub elevates play in easy and simple way.

Recommended accessories and services (not included)



HyperX Cloud III Wireless - Gaming Headset
77Z46AA



HyperX Alloy Rise 75 - Gaming Keyboards
7G7A4AA



HyperX Pulsefire Haste 2 Pro - 4K Wireless Gaming Mouse
A1KY5AA



3-year pickup and return
UC994E

Datasheet

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Specifications







Performance

Operating system
Windows 11 Home
Processor
Intel® Core™ i7-14650HX (up to 5.2 GHz with Intel® Turbo Boost Technology, 30 MB L3 cache, 16 cores, 24 threads)[6,7]
Processor family: Intel® Core™ i7 14th generation processor
Chipset
Intel® H770
Memory
16 GB DDR5-5600 MT/s (2 x 8 GB)
Transfer rates up to 5600 MT/s.
Memory slots: 2 SODIMM
Maximum memory: Supports up to 64 GB max system memory
Storage
1 TB PCIe® Gen4 NVMe™ M.2 SSD
100 GB Dropbox storage for 3 months[1]
Graphics
Discrete: NVIDIA® GeForce RTX™ 5060 Ti (8 GB GDDR7 dedicated) ;
Audio
DTS:X®
Power
500 W 80 Plus Platinum certified power supply;

Connectivity

Network interface
Integrated 10/100/1000 GbE LAN
Wireless connectivity
Realtek Wi-Fi 6 RTL8852BE-VT 802.11a/b/g/n/ax (2x2) and Bluetooth® 5.4 wireless card [11,12,13,46]
Ports
Front:
1 USB Type-C® 10Gbps signaling rate; 3 USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo
Rear:
4 USB 2.0 Type-A; 1 microphone; 1 RJ-45; 1 line in; 1 line out
Video connectors
1 HDMI 2.1b;3 DisplayPort™ 2.1b
Expansion slots
3 M.2 (2 for SSD, 1 for WLAN); 1 PCIe Gen4 x16; 1 PCIe Gen3 x1

Sustainability

Sustainable impact specifications
At least 20% recycled metal; At least 55% post-consumer recycled plastic[40,41]

Design

Product color
Shadow black
Textured finish

Software

HP apps
HP Connection Optimizer; OMEN Gaming Hub
Software
Otter.ai;
1 month trial for new Microsoft 365 customers[24,49,50]
Service & support
McAfee Online Protection 30-day trial; Xbox Game Pass Premium 2-month trial [2]

Additional information

Part Number
P/N: E2ZS5EA #ABU
UPC/EAN code: 881767841699
Weight
5.57 kg;
Packed: 8.72 kg
Dimensions
15.5 x 33.7 x 30.8 cm;
Packed: 40 x 49.9 x 28.7 cm
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.
Security management
Kensington Security lock slot; Padlock

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Footnotes

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, branding and/or naming is not a measurement of higher performance.
[2] Packaging parts contain certified or recycled fibers and are typically recycled in your local paper/carton recycling bin, consult your local guidelines.
[3] Recycling facilities not available in all locations.
[4] Recycled plastic is expressed as a percentage of the total weight plastic. Post-consumer recycled is based on the definition set in the EPEAT standard for computers, IEEE 1680.1-2018 standard.
[5] Recycled metal is expressed as a percentage of the total weight of the metal according to ISO 14021 definitions for metal parts over 25 grams.
[6] 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.
[7] 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. Intel and Core are trademarks of Intel Corporation in the U.S. and other countries.
[8] ©2025 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.
[9] For hard drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 35GB of system disk is reserved for system recovery software.
[10] Actual throughput may vary. USB Type-C® and USB-C® are trademarks of USB Implementers Forum.
[11] Subscription continues automatically at regular monthly price unless cancelled. Subject to https://www.xbox.com/legal/subscription-terms. Benefits vary by Xbox Game Pass plan. Game library varies over time, by region, device, and Xbox Game Pass plan. xbox.com/gamepass. In-game benefits vary by game, region, and over time. Game must be installed to access in-game benefits. For a list of cloud and non-cloud markets and supported regions, visit: xbox.com/regions. Terms apply, see xbox.com/gamepass for more. Excludes HP Chromebooks.
[12] Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Requires a wireless router, sold separately, that supports 80MHz channels. 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.

Technical Specifications Footnotes

[1] 100 GB of free Dropbox storage for 3 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.
[2] Internet access required and not included. McAfee is pre-installed on your PC and an account is required for activation. Subscription renewal required after trial period. VPN feature is not available in India, China, Syria or North Korea. McAfee is not compatible with Windows 11 in S mode. You'll need to permanently switch out of S mode. There's no charge to switch out of S mode, but you won't be able to turn it back on.
[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).
[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.
[40] Recycled plastic is expressed as a percentage of the total weight plastic. Post-consumer recycled is based on the definition set in the EPEAT criteria.
[41] Recycled metal is expressed as a percentage of the total weight metal as per defined in the EPEAT criteria.
[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.
[50] Copilot in Excel requires AutoSave to be enabled, meaning the file must be saved to OneDrive; it doesn't function with unsaved files. Copilot features in Outlook apply to accounts with @outlook.com, @hotmail.com, @live.com, or @msn.com email addresses and are available in Outlook.com, Outlook built into Windows, Outlook on Mac, and iOS and Android apps. AI features only available to Microsoft 365 Family subscription owner and cannot be shared; usage limits apply. Learn more Learn more Understanding AI credits - Microsoft Support . Microsoft Copilot features in Microsoft 365 are not available in China or Macao SAR.
[51] Weight and system dimensions may fluctuate due to configuration and manufacturing variances.

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July 2026