Datasheet

# OMEN 35L Gaming Desktop GT16-0050na PC

## Take the key to your gaming performance

The OMEN 35L Gaming Desktop PC unlocks your performance potential. It features the latest Intel® Core™ Processor[1] and advanced graphics, with OMEN branded components optimized for peak thermal capabilities and power. Designed for easy tool-less upgradability and personalization to suit your gaming needs.

*Product image may differ from actual product

### Optimized for performance

Play to your highest potential with a design that is optimized for performance.

### Futureproof, tool-less design

Designed for upgradability with OMEN Components, expand and customize within an industry-standard form factor.

### Make it your own

Customize performance and aRGB options with OMEN Gaming Hub.

## Sustainability in action

### We're in this together

It matters. With 100% recyclable packaging solutions[2], at least 20% recycled plastic content and 10% recycled metal[34], we are in this together[5].

with

# OMEN 35L Gaming Desktop GT16-0050na PC

## 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]

### Game without compromise. Go beyond performance with Intel Core and Intel Core Ultra Processors
Be everything you want to be, in-game and out with optimized performance and new features. Play harder and work smarter with Intel Core Processors.[7]

### Game Changer
Powered by NVIDIA Blackwell, GeForce RTX™ 50 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]

### DTS Headphone: X Technology
By producing authentic, spatially accurate 3D sound through any headphones or earbuds, this technology gives games, movies, and music a level of depth and immersion for the best entertainment experience possible.[10]

### USB Type-C® 5Gbps signaling data rate
Plug in your external storage with this USB Type-C® port, featuring 5Gbps signaling data rate. And it's reversible, so you never have to worry about plugging in upside down.[11]

### 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.

### 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 a smoother wireless experience with a Wi-Fi 7 and Bluetooth® 5.4 combo.[12]

### 120 mm 4-heatpipe RGB air cooler
Keep your system cool and vibrant with the 120mm RGB fan and 4-heatpipe design for efficient heat transfer and customizable RGB lighting effects.

### 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.

### Try PC Game Pass for free with your new HP device
Play hundreds of high-quality PC games with your new HP device and 3 free months of PC Game Pass – including EA play. With new games added all the time, there's always something new to play.[13]

## Recommended accessories and services (not included)

3-year pickup and return
U4812E

Datasheet

# OMEN 35L Gaming Desktop GT16-0050na PC

## Specifications

## Performance

**Operating system**
Windows 11 Home
**Processor**
Intel® Core™ i7-14700F (up to 5.4 GHz with Intel® Turbo Boost Technology, 33 MB L3 cache, 20 cores, 28 threads)[6,7]
Processor family: Intel® Core™ i7 14th generation processor
**Chipset**
Intel® Z790H
**Memory**
Kingston FURY 32 GB DDR5-6000 MT/s XMP RGB Heatsink (2 x 16 GB)
Transfer rates up to 6000 MT/s.
Memory slots: 4 DIMM
Maximum memory: Supports up to 128 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™ 5070 (12 GB GDDR7 dedicated) ;
**Audio**
5.1 surround sound; OMEN Audio Control DTS Headphone:X™ support
**Power**
850 W 80 Plus Gold certified ATX power supply;
**System coolers**
120 mm 4-heatpipe aRGB air cooler;

## Connectivity

**Network interface**
Integrated 10/100/1000 GbE LAN
**Wireless connectivity**
Intel® Wi-Fi 7 BE200 (2x2) and Bluetooth® 5.4 wireless card [12]
**Ports**
Top:
1 headphone/microphone combo; 1 USB Type-C® 5Gbps signaling rate (HP Sleep and Charge); 2 USB 2.0 Type-A (HP Sleep and Charge)[19,52]
Rear:
1 USB Type-C® 10Gbps signaling rate; 1 USB Type-C® 5Gbps signaling rate; 2 USB Type-A 10Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 2 USB 2.0 Type-A; 1 3.5 mm audio jack; 1 RJ-45
**Video connectors**
1 HDMI 2.1b;3 DisplayPort™ 2.1b
**Expansion slots**
1 PCIe x16; 1 PCIe x4; 3 M.2 (2 for SSD, 1 for WLAN)

## Sustainability

**Sustainable impact specifications**
Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; 20% post-consumer recycled plastic; Water based paint; 10% recycled metal; LDPE bag contains 30% recycled plastic[40,41]

## Design

**Product color**
Shadow black
Textured finish

## Software

**HP apps**
HP Connection Optimizer; HP Support Assistant; OMEN Gaming Hub; HP Enhanced Lighting; myHP
**Software**
Otter.ai;
1 month trial for new Microsoft 365 customers[24,49,50]
**Service & support**
McAfee Online Protection 30-day trial; 1-month Adobe free trial offer; PC Game Pass 3-month trial [2,25]

## Additional information

**Part Number**
P/N: BT7W8EA #ABU
UPC/EAN code: 199251568992
**Weight**
14.5 kg;
Packed: 18.5 kg
**Dimensions**
21 x 40.8 x 41 cm;
Packed: 59 x 33.2 x 58.3 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.
**Features**
Air cooling solution for processor
**Security management**
Kensington Security lock slot

# OMEN 35L Gaming Desktop GT16-0050na PC

## 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] 100% outer box/corrugate cushion packaging made from sustainably sourced certified and recycled fibers. Fiber cushions made from 100% recycled wood fiber and organic material. Any plastic cushions are made from >90% recycled plastic. Excludes plastic bags and plastic foam sheeting.
[3] 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.
[4] 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.
[5] Recycling facilities not available in all locations.
[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] 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] 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.
[11] Actual throughput may vary. USB Type-C® and USB-C® are trademarks of USB Implementers Forum.
[12] Wi-Fi 7: Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 7 (802.11BE) functionality requires compatible Windows 11 OS, compatible processor, and separately purchased Wi-Fi 7 router to support backwards compatibility with prior 802.11 specs. Available in countries where Wi-Fi 7 is supported. The specification for 802.11BE is a draft specification and is not final. If the final specification differs from the draft specification, it may affect the ability of the device to communicate with other 802.11BE devices.
[13] PC Game Pass: Subscription continues automatically at regular monthly price unless cancelled. Subject to xbox.com/subscriptionterms. Terms and exclusions apply. Game catalog varies over time, by region, and by device. All rights reserved. Xbox.com/pcgamepass, ea.com/ea-play/terms.Three month trial for devices purchased after October 2024. Microsoft account required. Offers available in select regions only. Credit card required. After promotional period, subscription automatically continues at the then-current regular price (subject to change), unless cancelled, plus applicable taxes. For cancellation details, see xbox.com/cancel. For complete details see terms and conditions https://www.xbox.com/en-US/xbox-game-pass?msockid=3f8c879b624a6bb10ac4924e63d86a01

### 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.
[12]Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 7 (802.11BE) functionality requires compatible Windows 11 OS, compatible processor, and separately purchased Wi-Fi 7 router to support backwards compatibility with prior 802.11 specs. Available in countries where Wi-Fi 7 is supported.
[19] For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.
[24] Must activate within 180 days of Windows activation.
[25] Offer available worldwide (excluding China and embargoed countries or other countries identified as restricted by applicable law or regulation) to new and existing subscribers who are 18+. Click on the Adobe icon in the start menu to redeem a 1-month free trial membership for select Adobe software. The software is tied to the device and is not transferrable. If you would like to sign up for an auto-renewing subscription, you can provide your payment method at sign-up. By adding a payment method, your subscription will automatically renew at the then current rate on your renewal date until you cancel. If you cancel before the end of the one-month free trial, you won't be charged. You can cancel your subscription anytime via your Adobe Account page or by contacting Customer Support. Please see current prices for Adobe products available in this offer. Offer not available to Education, OEM, or volume licensing customers. Subject to availability where the recipient resides. Additional terms and conditions may apply. VOID WHERE PROHIBITED OR RESTRICTED BY LAW.
[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 metal is expressed as a percentage of the total weight of the metal according to ISO 14021 definitions for metal parts over 25 grams.
[41] Percentage of water based paint varies by product; Percentage of post-consumer recycled plastic varies by product. Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 standard.
[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.

© Copyright 2026 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Intel, Core, Optane, Celeron, Pentium, Iris, XMM, and Thunderbolt are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. AMD, Ryzen, Athlon, and Radeon are trademarks of Advanced Micro Devices, Inc. Qualcomm and Snapdragon are trademarks or registered trademarks of Qualcomm Technologies, Inc. and/or its subsidiaries. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. NVIDIA and GeForce are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. McAfee and McAfee LiveSafe are trademarks or registered trademarks of McAfee LLC in the United States and other countries. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. All other trademarks are the property of their respective owners. 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.

February 2026