

HP OmniBook 7 NGAI 17-dc0501na

An AI PC for the toughest conditions and toughest work.

The HP OmniBook 7 17.3 Next Gen AI PC, with a 17.3" touch display⁵, was engineered to withstand demanding military standards¹ to perform in the toughest conditions. With the latest AI-powered Intel® Core™ Ultra Processor² it's also up for the toughest work.



*Product image may differ from actual product



Built with get-things-done grit

Work and study without worry of damage due to drops, bumps, or extreme temps with a durable PC.



Expand your world with AI-efficiency

Optimize performance and efficiency with the latest AI-boosted Intel® Processor².



Own it. Large and AI-in-charge.

Meet, present, and connect with vivid visuals and clear audio.

Sustainability in action

Built for a better tomorrow

HP OmniBook X 17.3 NGAI PCs are designed using recycled metals³ and post-consumer recycled plastics⁴.

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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

Intel® Core™ Ultra Processors

Make the hard stuff easy with Intel® Core™ Ultra processors. Accelerate AI experiences across hundreds of apps.⁷

Beyond Fast

NVIDIA® GeForce RTX™ 40 Series GPUs are beyond fast. Powered by the NVIDIA Ada Lovelace architecture which delivers a leap in both performance and AI-powered graphics. Experience lifelike virtual worlds with ray tracing and ultra-high FPS gaming.⁸

FHD IPS touchscreen

Always see your content at its best with 178° wide-viewing angles and a vibrant picture. And with touchscreen technology, you can control your PC right from the screen.⁹

Flicker-free

Using DC Dimming technology that controls brightness by adjusting direct current rather than cycling the backlight, we can eliminate screen flickering for more comfortable viewing.¹⁰

16:9 aspect ratio

A 16:9 aspect ratio lets you see more of your content with less scrolling.¹¹

Flicker-free

Using DC Dimming technology that controls brightness by adjusting direct current rather than cycling the backlight, we can eliminate screen flickering for more comfortable viewing.¹⁰

Poly Camera Pro

Poly Camera Pro elevates your video calls with AI to enjoy crystal clear video, customizable settings and professional grade features for a truly immersive video conferencing and collaboration experience.

HP AI Companion

Get the most out of your AI PC with the new HP AI Companion app. Elevate your everyday tasks with a collection of AI tools and solutions that can increase your productivity and keep you running at your best.¹²

McAfee Online Protection 30-day trial

Secure your device with award winning antivirus and online protection. Free trial includes secure VPN for privacy and data protection when browsing on public Wi-Fi¹³

Keyboard contains post-consumer recycled plastic

We're bringing a more thoughtful design to our keyboards by using post-consumer recycled plastic in the design.¹⁴

Utilizing recycled metals

HP incorporates increasing amounts of recycled, renewable, and non-virgin raw materials. Because little things make a big difference, this product includes a percentage of recycled metals in the design.¹⁵

Incorporating ocean-bound plastics

HP incorporates increasing amounts of recycled, renewable, and non-virgin raw materials. Built with the environment in mind, this product includes a percentage of ocean-bound plastic in the design.¹⁶

EPEAT® Gold with Climate+

With EPEAT® Gold with Climate+, you're choosing a movement towards responsibility and climate action.¹⁷

ENERGY STAR® certified

Save energy and money with ENERGY STAR®, certified by the EPA so you will use less energy and save money where it counts most.¹⁸

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 30 minutes.¹⁹

Bluetooth 5.4 Wireless Card

Bluetooth® 5.4 comes with two new features that together provide seamless connectivity.²⁰

Camera Shutter

No more unsightly tape and tacky gum to hide your private moments. Ensure your privacy and security with a visible, physical shutter that turns off your PC's camera when not in use.

5MP IR camera with temporal noise reduction and integrated dual array digital microphones

The high-quality-camera lets you video chat in stunning detail, at up to 2592x1944 resolution.²¹

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.²²

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.²³

Dual speakers

Pump up the volume to your favorite music, movie or game with dual-stereo speakers.

Thunderbolt™ 4 with USB™ 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.

LPDDR5X RAM

Experience speedy and responsive performance with the power efficient LPDDR5X memory. Designed to support higher data rates with less latency, plus faster file transfers and application load.

Backlit keyboard

Keep going even in dimly lit rooms or aboard red-eye flights. With an illuminated keyboard, you can type comfortably in more environments.

Recommended accessories and services (not included)



HP Universal USB-C Multiport Hub
50H98AA



HP 100 Sanitizable Mouse Pad
8X594AA



HP 720 Multi-Device Rechargeable Wireless Keyboard
and Mouse Combo
9T5A9AA



3-year pickup and return
UM963E



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Specifications



Performance

Operating system
Windows 11 Home

Processor
Intel® Core™ Ultra 7 258V (up to 4.8 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 8 cores, 8 threads)^{6,7}
Processor family: Intel® Core™ Ultra 7 processor
Neural Processing Unit (NPU): Intel® AI Boost (47 NPU TOPS)

Chipset
Intel® integrated SoC

Memory
32 GB LPDDR5x-8533 MT/s (onboard)
Transfer rates up to 8533 MT/s.
Number of User-accessible Memory Slots: 0

Storage
1 TB PCIe® Gen4 NVMe™ M.2 SSD
25 GB Dropbox storage for 12 months¹

Graphics
Discrete: NVIDIA® GeForce RTX™ 4050 Laptop GPU (6 GB GDDR6 dedicated);

Audio
DTS:X® Ultra; Dual speakers; HP Audio Boost; Poly Studio

Display
43.9 cm (17.3") diagonal, FHD (1920 x 1080), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, 400 nits, 100% sRGB

Screen-to-body ratio
86%¹⁸

Power
100 W USB Type-C® power adapter;

Battery type
6-cell, 83 Wh Li-ion polymer²³

Battery and Power
Up to 12 hours and 15 minutes³;
Supports battery fast charge: approximately 50% in 30 minutes⁵

Maximum battery life video playback
Up to 22 hours and 15 minutes¹⁰

Connectivity

Wireless connectivity
Intel® Wi-Fi 7 BE201 (2x2) and Bluetooth® 5.4 wireless card

Ports
3 USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 headphone/microphone combo; 1 Thunderbolt™ 4 with USB Type-C® 40Gbps signaling rate (USB Power Delivery 3.1, DisplayPort™ 2.1, HP Sleep and Charge); 1 USB Type-C® 10Gbps signaling rate (USB Power Delivery 3.1, DisplayPort™ 1.4a, HP Sleep and Charge)¹⁹

Webcam
5MP IR camera with temporal noise reduction and integrated dual array digital microphones

Sustainability

Ecolabels
EPEAT® Gold with Climate+²⁷

Energy star certified
ENERGY STAR® certified

Sustainable impact specifications
Ocean-bound plastic in speaker enclosure(s) and bezel; Keyboard keycaps and scissors contain post-consumer recycled plastic; Recycled metal in cover, keyboard frame and keyboard supporting plate^{39,40,41}

Design

Product color
Glacier silver aluminum
Sandblasted anodized finish

Software

HP apps
HP Support Assistant; HP Connection Optimizer; HP Enhanced Lighting; HP AI Companion

Software
Copilot in Windows with Copilot key; Poly Camera Pro; 1 month trial for new Microsoft 365 customers²⁴

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: BS8D6EA
UPC/EAN code: 199251522369

Weight
2.34 kg;
Packed: 3.62 kg

Dimensions
39.61 x 25.86 x 1.53 cm;
Packed: 8 x 46.1 x 30.3 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.

Keyboard
Full-size, backlit, soft grey keyboard with numeric keypad
HP Imagepad

Security management
Mic mute key; Camera privacy shutter; Trusted Platform Module (Firmware TPM) support



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Footnotes

Messaging Footnotes

¹ Testing is not intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Pack.

² 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 clock speed. Features and software that require a NPU may require software purchase, subscription or enablement by a software or platform provider, and third party software may have specific configuration or compatibility requirements. Potential NPU inferencing performance varies by use, configuration, and other factors.

³ 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.

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 16801-2018 standard.

⁵ Display measured diagonally.

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. Features and software that require a NPU may require software purchase, subscription or enablement by a software or platform provider, and third party software may have specific configuration or compatibility requirements. Potential NPU inferencing performance varies by use, configuration, and other factors.

⁸ ©2024 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 Full high-definition (FHD) content is required to view FHD images.

¹⁰ The flicker-free capability eliminates screen flickering through integrating DC-dimming LED backlights.

¹¹ All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

¹² HP AI Companion is available preloaded on select HP next gen AI PCs or is available for download from the Microsoft store and requires a HP next gen AI PC with a NPU supporting 40-60 TOPS and requires Windows 11. Perform requires account set up within 30 days of PC boot or enrollment through the HP AI Companion app. Some features require customer upload of local data. Five (5) library 100MB limit each, supported files may vary and at launch include pdf, txt., docx files.

¹³ 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.

¹⁴ Keyboard components contain post-consumer recycled plastic. Percentage of post consumer recycled contained in each component varies by product.

¹⁵ Laptops manufactured with recycled metal material in product cover. Percentage of recycled metal varies by product.

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

¹⁷ EPEAT® Gold with Climate+ registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country.

¹⁸ ENERGY STAR and the ENERGY STAR logo are registered trademarks of the U.S. Environmental Protection Agency.

¹⁹ Recharges your battery up to 50% within 30 minutes when the system is off using "shut down" command, using HP adapter provided with the notebook or recommended power adapter disclosed in specifications (see <http://store.hp.com>). 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.

²⁰ Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license. Optional features sold separately or as add-on features.

²¹ Features may require software or other 3rd party applications to provide the described functionality. Internet service required and not included.

²² 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.

²³ 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.

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-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.

³ MobileMark 25 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-25/> for additional details.

⁵ Recharges your battery up to 50% within 30 minutes when the system is off using "shut down" command, using HP adapter provided with the notebook or recommended power adapter disclosed in specifications (see <http://store.hp.com>). 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.

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.

¹⁰ Battery life tested by HP using continuous FHD video playback, 1080p (1920x1080) resolution, 150 nits brightness, system audio level at 17% as image default, player audio level at 100%, played full-screen from local storage, headphone attached or through speaker (if no audio jack port), wireless on but not connected. Actual battery life will vary depending on configuration and maximum capacity will naturally decrease with time and usage.

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 Windows 11 2024, select Intel® Core™ or Intel® Core™ Ultra processor, and a Wi-Fi 7 router, sold separately. Wi-Fi 7 is backwards compatible 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.

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.

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.

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 16801-2018 EPEAT®. EPEAT® status varies by country. Visit www.epeat.net for more information.

³⁷ Weight and system dimensions may fluctuate due to configuration and manufacturing variances.

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

⁴⁰ Laptops manufactured with recycled metal material in product cover. Percentage of recycled metal varies by product.

⁴¹ Keyboard components contain post-consumer recycled plastic. Percentage of post consumer recycled contained in each component varies by product.

⁴⁵ The Flicker-free capability is eliminating screen flickering through integrating DC-dimming LED backlights or LED emissions. OLED panel is functional with DC-DIMMING when above 100nits.

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.

