HP OmniBook 7 AI 16-ay0003sa

AI performance and portability with a brilliant 16” display[5].

Tough enough to meet demanding US military-grade standard testing[1], HP OmniBook 7 16 AI PC delivers durability, performance, and portability, powered by the latest AI-enhanced Intel® Core™ Ultra Processor[2] and a brilliant 16” display[5].

*Product image may differ from actual product

Military-grade-tested[1]. For the toughest tasks.
Engineered and tested to withstand drops, bumps, and extreme temperatures so you can work from anywhere.

Fits your need for power and speed.
Delivers AI power, an all-day, fast-charging battery, and all the ports you could want

Brilliant viewing
A 16" display[5] delivers brilliant viewing and ultra smooth visuals

Sustainability in action

Built for a better tomorrow
HP OmniBook 7 16 AI PCs are designed using recycled metals[3] and post-consumer recycled plastics[4].

with

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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]

Smarter. Faster. Lighter
Gaming, creating, AI. Do it all on Intel® Core™ Ultra processors[7]

Anti-glare panel
Enjoy the sun and your favorite content with this anti-glare panel. Non-reflective and low gloss means you'll get less glare while you're outside.

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.[8]

16:10 aspect ratio
A 16:10 aspect ratio lets you see more of your content with less scrolling.

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.[8]

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.

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-Fi[9]

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.[10]

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.[11]

EPEAT® Gold with Climate+
With EPEAT® Gold with Climate+, you're choosing a movement towards responsibility and climate action.[12]

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.[13]

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.[14]

Wi-Fi 6E (2x2) and Bluetooth® 5.3 wireless card
Enjoy faster speeds, improved performance, greater capacity and lower latencies than earlier iterations with Wi-Fi 6E and Bluetooth® 5.3 wireless card.[15]

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.[16]

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.[17]

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.[18]

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.

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 Travel USB-C Multi Port Hub
1C1Y5AA

HP 480 Comfort Bluetooth Mouse
8T6M3AA

HP 100 Sanitizable Mouse Pad
8X594AA

3-year pickup and return
UM963E

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Specifications

Performance

Operating system
Windows 11 Home
Processor
Intel® Core™ Ultra 5 225H (up to 4.9 GHz with Intel® Turbo Boost Technology, 18 MB L3 cache, 14 cores, 14 threads)[6,7]
Processor family: Intel® Core™ Ultra 5 processor
Neural Processing Unit (NPU): Intel® AI Boost (13 NPU TOPS)
Chipset
Intel® integrated SoC
Memory
16 GB DDR5-5600 MT/s (onboard)
Transfer rates up to 5600 MT/s.
Number of User-accessible Memory Slots: 0
Storage
1 TB PCIe® Gen4 NVMe™ M.2 SSD
25 GB Dropbox storage for 12 months[1]
Graphics
Integrated: Intel® Arc™ 130T GPU;
Audio
DTS:X® Ultra; Dual speakers; HP Audio Boost; Poly Studio
Display
40.6 cm (16") diagonal, 2K (1920 x 1200), IPS, micro-edge, anti-glare, 300 nits, 62.5% sRGB
Screen-to-body ratio
88.24%[18]
Power
100 W USB Type-C® power adapter;
Battery type
4-cell, 70 Wh Li-ion polymer[23]
Battery and Power
Supports battery fast charge: approximately 50% in 30 minutes[5]

Connectivity

Wireless connectivity
Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card
Modern Standby (Connected);HP Extended Range Wireless LAN
Ports
1 USB Type-A 10Gbps signaling rate; 1 USB Type-A 5Gbps signaling rate; 1 HDMI-out 2.1; 1 headphone/microphone combo; 1 Thunderbolt™ 4 with USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1, HP Sleep and Charge); 1 USB Type-C® 10Gbps signaling rate (USB Power Delivery, 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; Recycled metal in cover, keyboard frame, base and hinge cap(s); Keyboard keycaps and scissors contain post-consumer recycled plastic[39,40,41]

Design

Product color
Glacier silver
Sandblasted anodized finish

Software

HP apps
HP Support Assistant; HP Connection Optimizer; HP Enhanced Lighting
Software
Poly Camera Pro;
1 month trial for new Microsoft 365 customers[24]
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: BQ7W2EA #ABU
UPC/EAN code: 199251461552
Weight
1.91 kg;
Packed: 3.42 kg
Dimensions
35.78 x 25.48 x 1.5 cm;
Packed: 8 x 42.3 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 1680.1-2018 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, branding and/or naming is not a measurement of higher performance. Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost/ for more information. 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, software and other factors.
[8] The flicker-free capability eliminates screen flickering through integrating DC-dimming LED backlights.
[9] 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.
[10] Laptops manufactured with recycled metal material in product cover. Percentage of recycled metal varies by product.
[11] Percentage of ocean-bound plastic contained in each component varies by product.
[12] EPEAT® Gold with Climate+ registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country.
[13] ENERGY STAR and the ENERGY STAR logo are registered trademarks of the U.S. Environmental Protection Agency.
[14] Recharges your battery up to 50% within 30 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.
[15] Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported. Wi-Fi 6E is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately. Bluetooth® 5.3 operation requires Microsoft OS/Chrome OS support. Until Microsoft OS/Chrome OS support is available, Bluetooth® 5.3 will function as Bluetooth® 5.2 or lower.
[16] Features may require software or other 3rd party applications to provide the described functionality. Internet service required and not included.
[17] 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.
[18] 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.
[5] Recharges your battery up to 50% within 30 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. 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 6E is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately.
[12] Wi-Fi 6E requires a Wi-Fi 6E router, sold separately, to function in the 6GHz band. Availability of public wireless access points limited. Wi-Fi 6E is backwards compatible with prior 802.11 specs. And available in countries where 6GHz is supported.
[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 1680.1-2018 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® 5.3 operation requires Microsoft OS/Chrome OS support. Until Microsoft OS/Chrome OS support is available, Bluetooth® 5.3 will function as Bluetooth® 5.2 or lower.

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April 2025