Datasheet

HP OmniBook 5 NGAI 16-ag1001sa

Streamline your day with all the AI power you need.

Streamline your day with the HP OmniBook 5 Laptop AI PC, powered by the AMD Ryzen™ AI 300 Series Processor[1] and up to 50 TOPS for seamless multitasking. Create and captivate on a stunning 2K display[3], stay charged with HP Fast Charge[4], connect easily via USB-C, and access AI instantly with the Copilot key[5].

*Product image may differ from actual product

AI power to multitask

Multitask easily with this Copilot+ PC, AMD Ryzen™ AI 300 Series Processor[1] and a collection of solutions.

Visuals to lose yourself in

Enjoy a visual adventure with AMD Radeon 800M Graphics and display with less bezel and true-to-life visuals.

Seamlessly connect on the go

Showcase your ideas from anywhere with the FHD IR camera[6] with manual shutter for added privacy.

Sustainability in action

Built for a better tomorrow

This PC is EPEAT® Gold with Climate+[7] certified and contains post-consumer ocean-bound plastics[8].

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.[9]

AMD Ryzen™ AI 300 Series processors with AMD Radeon™ graphics
Unlock transformational AI PC experiences with AMD Ryzen™ AI 300 series processors. Designed for users to experience pure speed, responsiveness, and power efficient AI processing for Copilot+ PCs.[10]

AMD FreeSync™ technology
See and feel the difference of fluid, responsive gameplay. By synchronizing the refresh rate with your GPU, AMD FreeSync™ makes display stutter, input lag, and screen tears ancient history.[11]

Integrated AMD Radeon™ 800M graphics
AMD Radeon™ 800M graphics are built in for thrilling gaming performance, high resolution display support and hardware accelerated encoding with or without a discrete graphics card.

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

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.

Micro Edge display
By squeezing a larger screen into a smaller frame, this ultra-thin, barely visible bezel revolutionizes your display's appearance with a beautifully efficient design.[12]

IPS Panel
No matter where you stand, this screen delivers clear, vivid images with 178-degree wide-viewing angles, so everyone can get a great view.

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.[13]

Copilot in Windows with Copilot key
Copilot in Windows gives you intelligent answers. Access with just the touch of the Copilot key.[14]

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.[15]

EPEAT® Gold with Climate+
With EPEAT® Gold with Climate+, you're choosing a movement towards responsibility and climate action.[16]

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.[17]

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.[18]

Recycled aluminum
Because little things make a big difference, this laptop design includes sustainable materials like recycled aluminum.[19]

Try PC Game Pass for free with your new HP device
Play hundreds of high-quality PC games with your new HP gaming 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.[20]

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.[21]

Effortlessly connected
Enjoy faster speeds, improved performance and greater capacity with Wi-Fi 6 and Bluetooth® 5.4 wireless card.[22]

Microphone Mute
Enjoy greater peace of mind and the convenience of a dedicated microphone mute button that you can easily activate and know it's on or off with an LED indicator light.

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.

HP True Vision FHD IR camera
Log in safely through Windows Hello with the infrared sensor. With an 88-degree, wide-angle field of view, you can video chat with your entire family or group of friends in stunning detail.[23]

USB Type-C® Power + Display + 10Gbps signaling rate
Power your device or connect to an external display from just one USB-C® port with 10Gbps signaling rate. And it's reversible, so you never have to worry about plugging in upside down.[24]

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

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

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.

Recommended accessories and services (not included)

HP 680 Comfort Dual-Mode Keyboard and Mouse Combo
8T6L6AA

HP 100 Sanitizable Mouse Pad
8X594AA

HP Everyday 16-inch Laptop Backpack
A08JXAA

3-year pickup and return
U4819E

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Specifications

Performance

Operating system
Windows 11 Home
Processor
AMD Ryzen™ AI 5 340 (up to 4.8 GHz max boost clock, 16 MB L3 cache, 6 cores, 12 threads)[6,7]
Processor family: AMD Ryzen™ AI 5 processor
Neural Processing Unit (NPU): AMD Ryzen™ AI (50 NPU TOPS)
Chipset
AMD integrated SoC
Memory
16 GB LPDDR5x-7500 MT/s (onboard)
Transfer rates up to 7500 MT/s.
Number of User-accessible Memory Slots: 0
Storage
512 GB PCIe® Gen4 NVMe™ M.2 SSD
25 GB Dropbox storage for 12 months[1]
Graphics
Integrated: AMD Radeon™ 840M Graphics;
Audio
DTS:X® Ultra; Dual speakers; HP Audio Boost
Display
40.6 cm (16") diagonal, 2K (1920 x 1200), IPS, micro-edge, anti-glare, 300 nits, 62.5% sRGB[17]
Screen-to-body ratio
88.90%[18]
Power
65 W USB Type-C® power adapter;
Battery type
3-cell, 59 Wh Li-ion polymer[23]
Battery and Power
Up to 14 hours and 45 minutes[3];
Supports battery fast charge: approximately 50% in 30 minutes[5]
Maximum battery life video playback
Up to 16 hours and 45 minutes[10]

Connectivity

Wireless connectivity
Realtek Wi-Fi 6 (2x2) and Bluetooth® 5.4 wireless card [11,12,13,46]
Ports
1 USB Type-A 10Gbps signaling rate; 1 USB Type-A 5Gbps signaling rate; 1 HDMI-out 2.1; 1 headphone/microphone combo; 2 USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1, HP Sleep and Charge)[19]
Webcam
HP True Vision 1080p FHD 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, sideband and hinge cap(s)[39,40,41]

Design

Product color
Glacier silver aluminum
Matte finish

Software

HP apps
HP Support Assistant; HP Connection Optimizer; HP AI Companion
Software
Copilot in Windows with Copilot key;
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: BQ7V7EA #ABU
UPC/EAN code: 199251461507
Weight
1.79 kg;
Packed: 2.52 kg
Dimensions
35.77 x 25.48 x 1.79 cm (front); 35.77 x 25.48 x 1.86 cm (rear);
Packed: 6.3 x 50.4 x 30.5 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
Features
AMD FreeSync™[29]
Security management
Mic mute key; Camera privacy shutter; Trusted Platform Module (Firmware TPM) support

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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. AMD's numbering is not a measurement of clock speed.
[2] Copilot in Windows requires Windows 11. Some features require an NPU. Timing of feature delivery and availability varies by market and device. Requires Microsoft account to log in. Where Copilot is not available, the Copilot key will lead to the Bing search engine. See http://aka.ms/WindowsAIFeatures.
[3] All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.
[4] 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.
[5] Copilot in Windows requires Windows 11. Some features require an NPU. Timing of feature delivery and availability varies by market and device. Requires Microsoft account to log in. Where Copilot is not available, the Copilot key will lead to the Bing search engine. See http://aka.ms/WindowsAIFeatures.
[6] Camera resolution refers to the image sensor active pixels. The actual image capture pixels and aspect ratio depend on the app selected. Features may require software or other 3rd party applications to provide the described functionality.
[7] See www.epeat.net for registration status and tier levels by country.
[8] Laptops manufactured with recycled ocean-bound plastic material in product speaker enclosures, recycled aluminum material in product cover and post-consumer recycled plastic in keycaps. Percentage of material contained in each component varies by product.
[9] 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.
[10] 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. AMD'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. Copilot+ in Windows requires Windows 11. Some features require an NPU. Timing of feature delivery and availability varies by market and device. Requires Microsoft account to log in. Where Microsoft in Windows is not available, the Copilot key will lead to the Bing search engine. See aka.ms/copilotpluspcs.
[11] FreeSync™ is only available when it is connected on Display Port or HDMI port. FreeSync™ is an AMD technology enabled on FHD or QHD displays and is designed to eliminate stuttering and/or tearing in games and videos by locking a display's refresh rate to the frame rate of the graphics card. Monitor, AMD Radeon™ Graphics and/or AMD A-Series APU compliant with DisplayPort™ Adaptive-Sync required. AMD Catalyst™ 15.2 Beta (or newer) required. Adaptive refresh rates vary by display.
[12] Display measured diagonally
[13] The flicker-free capability eliminates screen flickering through integrating DC-dimming LED backlights.
[14] Timing of feature delivery and availability varies by market and device. Requires Microsoft account to log in. See aka.ms/copilotpluspcs. Copilot is NOT available in China, Russia, Belarus, and embargoed regions Cuba, Iran, North Korea, Crimea
[15] 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.
[16] EPEAT® Gold with Climate+ registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country.
[17] ENERGY STAR and the ENERGY STAR logo are registered trademarks of the U.S. Environmental Protection Agency.
[18] Keyboard components contain post-consumer recycled plastic. Percentage of post consumer recycled contained in each component varies by product.
[19] Includes recycled metal.
[20] Xbox Game Pass sold separately. Credit card required. Unless you cancel, you will be charged the then-current regular membership rate when the promotional period ends. Terms, exclusions, and streaming limits apply. Xbox Cloud Gaming (Beta): select devices and regions. After term, active membership required to play games and online multiplayer. Game catalog varies over time, region, and by device. DLC sold separately; if a game is removed from catalog or your membership ends, you will need to purchase the game separately to use your DLC. If you're already an Xbox Live Gold and/or Game Pass for Console/PC member, any days remaining in your membership(s) will be converted to Ultimate using a conversion ratio. Future code redemptions also subject to conversion ratio. All conversions to Ultimate are final. Details and system requirements at www.xbox.com/gamepass. Offer valid in all Xbox Game Pass markets excluding Russia. Digital Direct: Your digital content will be delivered directly to your device during set-up; no codes required. PC Game Pass: Subscription continues automatically at regular monthly price unless cancelled. Subject to xbox.com/subscriptionterms
[21] 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 vawy +/- 10% due to System tolerance. Available on select HP products.
[22] 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. 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. Wi-Fi 6 (802.11ax) is not supported in Belarus where Wi-Fi settings will be optimized to local regulatory requirements (802.11ac). 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. Bluetooth® is a trademark owned by its proprietor and used by HP Inc. under license.
[23] Features may require software or other 3rd party applications to provide the described functionality.
[24] Actual throughput may vary. USB Type-C® and USB-C® are trademarks of USB Implementers Forum. Display measured diagonally

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 don'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). 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. AMD's numbering is not a measurement of clock speed.
[7] Max Boost clock frequency performance varies depending on hardware, software and overall system configuration.
[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.
[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).
[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.
[29] AMD FreeSync™ /FreeSync™ Premium/FreeSync™/FreeSync™ Replay Premium Pro is enabled on FHD or higher resolution displays, with the additional requirements, such as at least 120Hz refresh rate, low framerate compensation, and HDR to support AMD FreeSync™ Premium/ FreeSync™ Premium Pro/FreeSync™ Replay. AMD Radeon Graphics and/or AMD A-Series APU-compliant monitors with DisplayPort/HDMI Adaptive-Sync required. AMD 15.11 Crimson driver (or newer) required to support FreeSync over HDMI. Adaptive refresh rates vary by monitor. AMD FreeSync™ /FreeSync™ Premium/FreeSync™/FreeSync™ Replay Premium Pro technology requires AMD Radeon graphics and a display certified by AMD. See www.amd.com/freesync for complete details. GD-127 © 2023 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, Radeon, FreeSync, and combinations thereof are trademarks of Advanced Micro Devices, Inc.
[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.

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