HP Spectre x360 16 inch 2-in-1 Laptop PC 16-f2013dx





Product overview

- · Show yourself in your best light: You're at your best when you're looking your best. With HP GlamCam, an intelligent 5MP camera that provides backlight adjustment, auto frame and appearance filter, you can keep your focus on what you're saying, not what you look like.
- Helps protect well-being: This 2-in-1 laptop helps protect your well-being by alerting you when it's time to take a
 break or you're too close to the screen with a screen time reminder and screen distance reminders. It also helps protect your privacy with walk away recognition, attention tracking, shoulder surfing protection, privacy camera shutter, mute mic button and built-in fingerprint reader. Plus keep your eyes comfortable with adaptive color and Eyesafe® Certified low blue light panels
- Boosts productivity: Settle for perfection. Get it all done with remarkable specs, like a taller display for more viewing area and less scrolling, plus the latest Intel[®] processor and long battery life for all the power you can handle. Because little things make a big difference: Better feels better. Opening the sustainable packaging is just the first
- sign that you've made an eco-friendly choice. Containing ocean-bound plastic, recycled aluminum, EPEAT® Gold and ENERGY STAR® ratings, you can feel like you made a difference, along with a great choice.

Key specifications

Operating system: Windows 11 Home⁽¹⁾

- Processor: Intel® Evo™ platform powered by 13th Generation Intel® Core™ i7-13700H^(2b)
- Display: 16-inch diagonal, 3K+ (3072 × 1920), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, Corning[®] Gorilla[®] Glass NBT[™], Low Blue Light
- Memory: 16 GB DDR4-3200 MHz RAM (onboard)
- Internal storage: 512 GB PCIe[®] Gen4 NVMe[™] M.2 SSD^{(15)(58e)}
- Graphics: Intel[®] Iris[®] X^e Graphics^{(14)(14a)} Sound: Audio by Bang & Olufsen with quad speakers
- Batterv life:
- Up to 15 hours (mixed usage)⁽⁸⁵⁾
- Up to 17 hours and 45 minutes (video playback)⁽⁷⁵⁾ Wireless: Wi-Fi 6E (2x2)^(19d) and Bluetooth® 5.3 wireless card⁽²⁵⁾⁽²⁶⁾ (supporting gigabit data rate)^(7e)
- Camera: HP True Vision 5MP IR camera with camera shutter, temporal noise reduction and integrated dual array digital microphones⁽⁸⁹⁾⁽⁸⁹
- Security: Fingerprint reader
- Product weight: 4.74 lb⁽⁷⁶⁾
- Kevboard: Full-size, backlit, nightfall black keyboard
- Included:
- HP Protective Sleeve HP Rechargeable MPP2.0 Tilt Pen in nightfall black

Product features

- Get a fresh perspective with Windows 11: 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.⁽¹⁾
 Extend beyond performance to let your PC do even more at once: Offering more than just a performance score.
- Exceptional experiments (ore[™] Processor advances real-world computing and delivers more ultra-efficient multi-tasking).
 Exceptional experience, anywhere: Intel[®] Evo[™] brings you a premium thin and light laptop experience with an ideal combination of performance, consistent responsiveness, and long-lasting battery. Enjoy built-in intelligence features
- like noise suppression, so you can collaborate seamlessly and confidently. Intel® Iris® Xe graphics: Impressive performance for creating, gaming, and entertainment. A new level of graphics
- performance and crisp, stunning visuals with the convenience of a thin & light laptop 3K+ IPS touchscreen display: 3072 x 1920 resolution delivers incredible details and lifelike colors. And with touch, you can control your PC right from the screen.⁽²⁰⁾
- Corning® Gorilla® Glass NBT™. Stands up to all the daily abuse a touch screen takes. Help reduce accidental damage
 with strong, more durable protection than most displays.
- Flicker-free: Using DC Dimming technology, we can eliminate screen flickering for more comfortable viewing.⁽⁶¹⁾
- HP Fast Charge: Go from 0 to 50% charge in approximately 45 minutes.
- WI-FI 6E: Enjoy faster speeds, improved performance, greater capacity and lower latencies than earlier iterations with Wi-Fi 6E and Bluetooth® 5.3 wireless card.^{(190/25)(26)}



Uncompromised connection

The HP Spectre x360 16 inch 2in-1 helps you look your best thanks to the 5MP camera that keeps you in-frame and well-lit. It's packed with clever features that protect your well-being and your privacy.

Additional product features

- · Fingerprint reader: Seamlessly log in to your device in any position with the touch of your finger. Patented 3-D print technology ensures secure access.⁽⁹⁾
- · All-in-One Keyboard: Control your privacy, security and multimedia with the touch of a button. With all your hotkeys in one area, seamlessly navigate with no distractions. Microphone mute: Dedicated microphone mute button with an LED indicator light.
- HP True Vision 5MP IR camera with camera shutter: Video chat with peace of mind with a privacy camera you can close when not in use. The infrared sensor gives you the added security of Windows Hello for a safer way to log in to vour computer.⁽⁸⁹ PCle® NVMe™ SSD storage: Get up to 12.8x faster performance than a SATA SSD.^(58e)
- · An exceptionally rich audio experience: With HP Quad Speakers, HP Audio Boost, and custom tuning by the experts at Bang & Olufsen, entertainment comes to life with sound you can feel. Awaken your senses with PC audio norfortion
- . HP Rechargeable MPP 2.0 Tilt Pen included: Create naturally with no interruptions. Improved latency and greater sensitivity allow you smoothly transition between colors for finer details while you write, draw and edit on any of your devices.

Product design

- 360° geared hinge: Innovatively engineered to rotate 360 degrees so that you can use your device in four positions. · 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
- Detects when to hibernate: Your laptop automatically detects when placed in a carrying bag and goes into hibernation to prevent battery drain and overheating. • 91% screen to body ratio: Revolutionize your display and see more of what you love with this slim bezel design.
- Enjoy an immersive multimedia experience with a maximized viewing area.

Created with the planet in mind

HP is dedicated to driving progress toward a more sustainable future and making responsible choices for the environment and our customers. We are innovating new ways to reduce the amount of materials in our products and packaging—and to use more recycled materials in their design. Together we can make a difference.

- Built with the environment in mind, this laptop is designed using sustainable materials like
- Ocean-bound plastic in bezel and speaker enclosures^(63c) Keyboard keycaps made with post-consumer recycled plastic^(63b)
- Keyboard mechanism includes agriculture waste $^{\rm (63a)}$ Cover, base and keyboard deck made from recycled metal $^{\rm (63d)}$
- HP's outer boxes and fiber cushions used in packaging are 100% sustainably sourced and recyclable.^(63e)
- ENERGY STAR[®] certified⁽⁶²⁾ EPEAT[®] Gold registered⁽²⁷⁾

Warranty and support

Our Customer Support Team consistently provides quick, responsive assistance in the U.S., Canada and Latin America

ded with your product:

- HP's Hardware Limited Warranty: Full warranty details are included with your product. Technical Support for Software & initial set-up: Warranty details are included with your product.
- Support Options: HP Support Assistant - HPSA: Optimized to enhance your support experience. Help for your PC and HP printers
- whenever vou need it.
- Online Support: For technical support with this product, visit HP Customer Support http://support.hp.com.⁽⁹⁾ · Social Media Support: To find solutions, ask questions, and share tips, join us on the HP Support Community at
- nmunity.hp.com, on Twitter at twitter.com/HPSupport, and Facebook at facebook.com/HPSupport.⁽⁹⁾







AUDIO BY **BANG & OLUFSEN**



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Specifications

Specifications		Software	
Operating system	Windows 11 Home ⁽¹⁾	Help and support	• myHP: myHP provides a simple setup and registration experience that welcomes you to your new HP PC
Processor	Intel [®] Evo [™] platform powered by 13th Generation Intel [®] Core [™] i7-13700H ^(2b) 14-Core		Customize, optimize, and secure your device with tips and tricks and easy-to-access settings, and receiv helpful messages and information to keep things running smoothly. • IP Support Assistant: Included with your computer, this free self-help tool makes it easier than ever the theory of the setting of the setting of the set
Processor speed	 Up to 5.0 GHz with Intel[®] Turbo Boost Technology^(2g) 		 ar support assistant: included with your computer, this nee set -help tool makes it easier than ever get help with your HP PC and printers.⁽⁵⁶⁾
Processor cache	24 MB L3 cache	Security and + HP BIOS Protection: Get peace of mind knowing your PC BIOS is protected. HP BIOS Protection automatically checks its health and recovers itself. ⁽²³⁾ Einexemptiate radies Search Use in which Search of sume Figure 19	
Memory	16 GB DDR4-3200 MHz RAM (onboard)		 automatically checks its health and recovers itself ⁽²³⁾ Fingerprint reader: Securely log in with a touch of your finger.⁽⁹⁾
Accessible memory slots	Memory slot not user accessible	Partner offers	• Addbe Offer: Get a complicit neetary in an interface of the productivity and productivity apps from Adobe with the purchase of a computer from HP. Create anything you can imagine – photos, videos, graphics, webpages, PDFs, and more. Get started with the app that best fits your need. ⁶⁶⁶⁰ Dropbox Cloud storages: Store and synchronize your content online with Dropbox. Get 100GB of storag for one year to access, manage, and share your photos, music, and files from anywhere with Internet access. ⁶⁰¹²⁰ MCAfee LiveSafe ⁷⁹ : Protect your operating system with a free 30-day MCAfee LiveSafe ⁷⁹ trial. ⁶⁰¹
Video graphics	 Intel[®] Iris[®] X^e Graphics^{(14)(14a)} 		
Internal storage	 512 GB PCIe[®] Gen4 NVMe[™] M.2 SSD^{(15)(58e)} 		
Finish and features	Top cover: nightfall black aluminum with a sandblasted finish Keyboard deck: nightfall black aluminum with a sandblasted finish		
Camera	 HP True Vision 5MP IR camera with camera shutter, temporal noise reduction and integrated dual array digital microphones⁽⁸⁹⁾⁽⁸⁹⁾⁾ 		 HP Command Center: Customize performance, fan speed and noise, and external temperature—all to meet your needs. HP Display Control – Auto Color: HP Display Control lets you choose a color space preset for true color accuracy when web browsing, editing photos or watching videos. The new Auto Color setting will select the best color space automatically based on the application you're using. HP Constraint of ptimizer: Get consistent and reliable WH-Fi performance with software that
Display	 16-inch diagonal, 3K+ (3072 x 1920), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, Corning[®] Gorilla[®] Glass NBT[™], Low Blue Light, 400 nits, 100% sRGB⁽²⁰⁾ 		
Screen to body ratio	• 91.0% ⁽⁴⁰⁾		
Wireless connectivity	• Wi-Fi 6E (2x2) ^(19c) and Bluetooth [®] 5.3 wireless card ⁽²⁵⁾⁽²⁶⁾ (supporting gigabit data rate) ^(7e)	Work and lifestyle	automatically switches between the most efficient wireless access points. ⁽⁶⁾ • HP Adaptive Color: Easy on the eyes - Adaptive Color automatically adjusts display color and brightness based on your environment for more comfortable wiewing. To ease eye strain, the display shows a coole light when it's daytime and gets warmer when the sun goes down. • HP Enhanced Lighting: Easily enhance brightness, color and lighting effects to look your best during video calls with integrated HP Enhanced Lighting app. • Duet* for HP: Use your tablet, phone, or another PC as a secondary display to expand your working space. ¹¹⁰⁰ • Al Noise Removal: Artificial intelligent technology automatically removes background noise for clearer than ever video chats, audio calls, and recordings. • HP GlamCam: Focus on what your is easying, not your looks with camera enhancements and Auto Frame that keeps you centered, in focus, and free to move around. Backlight adjustment brings the right amount of lighting to your face when moving from room to room. • Intel* Unisom*:
Digital media	1 Micro SD media card reader		
Sound	Audio by Bang & Olufsen with quad speakers		
Integrated keyboard	 Full-size, backlit, nightfall black keyboard HP Imagepad 		
External notebook ports	2 Thunderbolt [™] 4 with USB Type-C [®] 40Gbps signaling rate (USB Power Delivery, DisplayPort [™] 1.4, HP Sleep and Charge) ^(#220053164) 1 USB Type-A 10Gbps Signaling rate (HP Sleep and Charge) ⁽⁶⁴⁾ 1 headphone/microphone combo 1 AC smart pin 1 HOML 2.1		
Dimensions	 Unpackaged: 14.09 in (W) x 9.66 in (D) x 0.78 in (H) Packaged: 16.97 in (L) x 5.35 in (W) x 12.99 in (H) 	Gaming and	Intel [®] Unison [™] seamlessly connects your PC and devices for a universal, easy to use experience. ⁽⁹⁰⁾ OMEN Gaming Hub: Your one place for everything to make your gaming experience better. From
Weight	• Unpackaged: 4.74 (b ^{/78)} • Packaged: 9.66 lb	entertainment	software enhancements to hardware control, and live services, OMEN Gaming the levels play in an easy and simple way.
What's in the box	HP Protective Sleeve HP Rechargeable MPP2.0 Tilt Pen in nightfall black	Additional Information	
Security	Fingerprint reader: All-in-One Keyboard: Support power button, HP hotkey, camera shutter key, mic mute key, and fingerprint reader in keyboard area.	Product number	• 7H0Z9UA#ABA
		Ad embargo date	• 03/03/2023
Power	6-cell, 83 Wh Li-ion polymer battery ⁽²¹⁾	UPC Code	• 197192366912
	90 W Smart AC power adapter	Country of origin	• China
Battery life	Up to 15 hours (mixed usage) ⁽⁸⁵⁾ Up to 17 hours and 45 minutes (video playback) ⁽⁷⁵⁾	Pallet information	 Dimensions: 43.74 in (L) x 38.39 in (W) x 44.07 in (H) Total weight: 555.6 lb Layers: 3 Products per layer: 18
Warranty and support	 1-year limited hardware warranty. Additional information available at www.support.hp.com⁽⁹⁾ 1-year limited technical support for software and initial setup (from date of purchase)^(S3) 		

Learn more at hp.com

(1) 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:// vs.com. (2b) 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, Pentium, Intel Core, Celeron, Iris Xe, Intel logo and the Intel Inside logo are trademarks of Intel Corporation in the U.S. and other countries. ⁽²⁾ Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See intel.com/technology/turboboost for more information. GHz refers to internal clock speed of the processor. Other factors besides clock speed may impact system and application performance. (70) 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. (8) Internet access required and not included. Subscription required after 30 days trial period. McAfee, LiveSafe and the McAfee logo are trademarks or registered trademarks of McAfee, Inc. in the United States and other countries. (9) Wireless access point and internet service required and sold separately. Availability of public wireless access points limited.¹¹⁽⁴⁾ Shared video memory (UMA) uses part of the total system memory for video performance. System memory dedicated to vide performance is not available for other use by other programs. ^(14a) Intel[®] Iris[®] Xe Graphics capabilities require system to be configured with Intel[®] Core[™] i5 or i7 processors and dual channel memory. Intel[®] Iris[®] Xe Graphics with Intel[®] Core[™] i5 or i7 processors and single channel memory will only function as Intel[®] UHD Graphics. ⁽¹⁵⁾ Actual formatted capacity is less. Portion of internal storage is reserved for preloaded content. ⁽¹⁶⁾ preinstalled on this PC. Unlock use on secondary devices by downloading the app from the iOS or Google Play store and connect to your PC. Pen/touch input from a secondary device requires upgrade to the Duet Pro version, available for purchase through the Duet for HP app. ⁽¹⁾ compatible with prior 802.11 specs. And available in countries where Wi-Fi 6E is supported. (20) All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.⁽²¹⁾ 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.⁽²²⁾ 100GB of free online storage for one year from date of registration. For complete details and terms of use, including cancellation policies, visit the website at dropbox.com. Internet service required and otient locus⁻¹ robusto in regulation, but complete becaus and centre of use, including calification of policies, visit the website at dropbox.com. Internet service required and not included. ⁽²⁾ HP BIOS Protection works with Windows 11 that ships with your PC. ⁽²⁾ 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. ⁽²⁰⁾ Bluetooth[®] 5.3 transmission according to IEEE 1680.1-2018 EPEAT[®] status varies by country. Visit www.epeat.net for more information. ⁽⁴⁰⁾ Percent of active plus nonactive viewing area to active viewing area plus border. Measure with lid vertical to the desk. ⁽⁴²⁾ USB Type-C[®] and USB-C[®] are trademarks of USB Implementers Forum.⁽⁵⁰⁾ DisplayPort[™] and the DisplayPort[™] logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries.⁽⁵¹⁾ Thunderbolt is a trademark of Intel Corporation or its subsidiaries in the U.S. and/or other countries.⁽⁵³⁾ Call 1.800.474.6836 or support.hp.com for more information on Care Packs available after standard warranty expires. After standard warranty expires, an incident fee may apply.⁽⁵⁶⁾ For more information visit hp.com/go/hpsupportassistant. (Link will vary outside of the U.S.) HP Support Assistant is only available on Windows-based PCs. Internet connection required for updating and connecting to HP Support. (See Based on HP internal testing using CrystalDiskMark benchmarking software.) Performance is sequentially read compared to SATA SSD. (61) 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. (62) ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency. (63a) Keyboard scissors contain natural, renewable feedstock based on mass balance approach.^(63b) Percentage of post-consumer recycled plastic contained in keycaps varies by product.^(63d) Percentage of ocean-bound plastic contained in each component varies by product. ^(63d) Percentage of recycled metal varies by product.^(63d) 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. Excludes plastic bags and plastic foam sheeting. ⁽⁶⁴⁾ For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.⁽⁷⁵⁾ Battery life tested by HP using control users HD wide playback. 1980p (1920x1800) resolution, 150 nits brightness, system audio level at 17%, player audio level at 100%, played full-screen from local storage, headphone attached, wireless on but not connected. Actual battery life will vary depending on configuration and maximum capacity will naturally decrease with time and usage. ^(FG) Weight and system dimensions may fluctuate due to configuration and manufacturing variances. (78) Recharges your battery up to 50% within 45 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. (85) Windows MobileMark 18 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 bapco.com/products/mobilemark-2018/ for additional details. ^{Boal} 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. ⁽⁸⁹⁾ Features may require software or other 3rd party applications to provide the described functionality. Internet service required and not included. (890) Camera resolution refers to the image sensor active pixels. The actual image capture pixels depend on the app and/or aspect ratio selected. (90) Intel® Unison* solution is currently only available on eligible Intel[®] Evo[™] designs on Windows-based PCs and only pairs with Android- or iOS-based phones; all devices must run a supported OS version. See intel.com/performance-evo for details, including set-up requirements. Results may vary. Actual product may vary from image shown on datasheet. © Copyright 2023 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 shall be construed as constituting an additiona warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks are property of their respective owners. 01/10/2023_r3 kc

