

# HP Spectre x360 13.5 inch 2-in-1 Laptop PC 14-ef2023dx



## Look great, sound great anywhere

Masterfully crafted to combine the performance you need with the stunning design you want, this 2-in-1 laptop with tent, and tablet mode delivers on all levels. From audio-visual excellence to the latest technology, this sleek machine is all ready to go when you are.

### Product overview

- **Dynamic premium video experience:** When you go live, you want to look your best. So turn it on for HP Presence qualified Appearance Filter, Backlight Adjustment, Auto Frame, and AI noise reduction for the best, most productive calls. It also features a physical camera shutter for privacy, because when you're on, you're on, and when you're not, you're not.
- **Latest technology:** This powerful machine comes with a 13th Gen Intel® Core™ i7 processor and a 3:2 aspect ratio for a taller screen so you can see more.<sup>(20)</sup> Unite your ideas and devices into one seamless ecosystem with Intel® Unison. With the x360 2-in-1 design you can use it as a laptop, flip it around to use it as a tablet or put it in tent mode to stream away.
- **Because little things make a big difference:** Crafted from recycled aluminum and ocean-bound plastics, this 2-in-1 laptop is EPEAT® Gold Certified and ENERGY STAR® rated so you can feel like you made a difference, along with a great choice.

### Key specifications

- **Operating system:** Windows 11 Home<sup>(1)</sup>
- **Processor:** Intel® Evo™ platform powered by 13th Generation Intel® Core™ i7-1355U<sup>(2)</sup>
- **Display:** 13.5-inch diagonal, 3K2K (3000 x 2000), OLED, multitouch-enabled, UWVA, edge-to-edge glass, micro-edge, anti-reflection Corning® Gorilla® Glass NBT™, Low Blue Light<sup>(22)</sup>
- **Memory:** 16 GB LPDDR4x-4266 MHz RAM (onboard)
- **Internal storage:** 1 TB PCIe® Gen4 NVMe™ M.2 SSD<sup>(15)(58a)</sup>
- **Graphics:** Intel® Iris® X® Graphics<sup>(14)(14a)</sup>
- **Sound:** Audio by Bang & Olufsen with quad speakers
- **Wireless:** Wi-Fi 6E (2x2)<sup>(19c)</sup> and Bluetooth® 5.3 wireless card<sup>(25)(26)</sup> (supporting gigabit data rate)<sup>(7e)</sup>
- **Security:** Fingerprint reader
- **Camera:** HP True Vision SMP IR camera with camera shutter, temporal noise reduction and integrated dual array digital microphones<sup>(89)(89a)</sup>
- **Product weight:** 3.01 lb<sup>(76)</sup>
- **Keyboard:** Full-size, backlit, nightfall black keyboard

### 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.<sup>(11)</sup>
- **Extend beyond performance to let your PC do even more at once:** Offering more than just a performance score. This 13th Gen Intel® Core™ 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® X® 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.
- **3K2K OLED display:** See more of your screen with less scrolling with a 3:2 aspect ratio that delivers an optimized portrait view for a more comfortable way to read and browse.<sup>(20)</sup>
- **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.
- **Eyesafe® Certified Display:** Eyesafe® certified displays meet TÜV low blue light requirements and Eyesafe® standards for protecting your eyes from harmful blue light without distorting colors to reduce eyestrain when working for long periods of time.
- **OLED with VESA DisplayHDR 400 True Black Certification:** A VESA DisplayHDR True Black certified display with pixel dimming that presents true black color, high contrast, and low blue light that's easier on your eyes.<sup>(36)</sup>
- **Delta E <2 color accuracy:** Revel in brighter moments with the ultimate color accuracy. Delta E <2 improves color accuracy to give you the truest, lifelike imagery with no distortion for all your creative needs.
- **HP Fast Charge:** Go from 0 to 50% charge in approximately 45 minutes.<sup>(78)</sup>
- **PCIe® NVMe™ SSD storage:** Get up to 12.8x faster performance than a SATA SSD.<sup>(58a)</sup>

### Additional product features

- **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.<sup>(19c)(25)(26)</sup>
- **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 perfection.
- **Fingerprint reader:** Seamlessly log in to your device in any position with the touch of your finger. Patented 3-D fingerprint technology ensures secure access.<sup>(9)</sup>
- **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 SMP 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 your computer.<sup>(89)</sup>
- **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.<sup>(12)(43)</sup>

### Product design

- **360° geared hinge:** Innovatively engineered to rotate 360 degrees so that you can use your device in four positions.
- **90% 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.
- **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.

### 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<sup>(63d)</sup>
  - Keyboard keycaps made from post-consumer recycled plastic<sup>(63b)</sup>
  - Keyboard mechanism includes agriculture waste<sup>(63a)</sup>
  - Cover, base, keyboard deck and hinge caps made from recycled metal<sup>(63d)</sup>
- HP's outer boxes and fiber cushions used in packaging are 100% sustainably sourced and recyclable.<sup>(63e)</sup>
- ENERGY STAR® certified<sup>(62)</sup>
- EPEAT® Gold registered<sup>(27)</sup>

### Warranty and support

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

#### Included 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 - HP5A:** Optimized to enhance your support experience. Help for your PC and HP printers whenever you need it.<sup>(56)</sup>
- **Online Support:** For technical support with this product, visit HP Customer Support <http://support.hp.com>.<sup>(9)</sup>
- **Social Media Support:** To find solutions, ask questions, and share tips, join us on the HP Support Community at [community.hp.com](http://community.hp.com), on Twitter at [twitter.com/HPsupport](https://twitter.com/HPsupport), and Facebook at [facebook.com/HPsupport](https://facebook.com/HPsupport).<sup>(9)</sup>



**Specifications**

<b>Operating system</b>	• Windows 11 Home <sup>(1)</sup>
<b>Processor</b>	• Intel® Evo™ platform powered by 13th Generation Intel® Core™ i7-1355U <sup>(2)</sup> • 10-Core
<b>Processor speed</b>	• Up to 5.0 GHz with Intel® Turbo Boost Technology <sup>(2)</sup>
<b>Processor cache</b>	• 12 MB L3 cache
<b>Memory</b>	• 16 GB LPDDR4x-4266 MHz RAM (onboard)
<b>Accessible memory slots</b>	• Memory slot not user accessible
<b>Video graphics</b>	• Intel® Iris® Xe Graphics <sup>(14)(14a)</sup>
<b>Internal storage</b>	• 1 TB PCIe® Gen4 NVMe™ M.2 SSD <sup>(15)(58a)</sup>
<b>Finish and features</b>	• Top cover: nightfall black aluminum with a sandblasted finish • Keyboard deck: nightfall black aluminum with a sandblasted finish
<b>Camera</b>	• HP True Vision 5MP IR camera with camera shutter, temporal noise reduction and integrated dual array digital microphones <sup>(59)(59a)</sup>
<b>Display</b>	• 13.5-inch diagonal, 3K2K (3000 x 2000), OLED, multitouch-enabled, UWVA, edge-to-edge glass, micro-edge, anti-reflection Corning® Gorilla® Glass NBT™, Low Blue Light, SDR 400 nits, HDR 500 nits, 100% DCI-P3, 1,000,000:1 <sup>(20)</sup>
<b>Screen to body ratio</b>	• 90.1% <sup>(40)</sup>
<b>Wireless connectivity</b>	• Wi-Fi 6E (2x2) <sup>(19c)</sup> and Bluetooth® 5.3 wireless card <sup>(25)(26)</sup> (supporting gigabit data rate) <sup>(74)</sup>
<b>Digital media</b>	• 1 Micro SD media card reader
<b>Sound</b>	• Audio by Bang & Olufsen with quad speakers
<b>Integrated keyboard</b>	• Full-size, backlit, nightfall black keyboard • HP Imagepad
<b>External notebook ports</b>	• 2 Thunderbolt™ 4 with USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge) <sup>(42)(51)(64)</sup> • 1 USB Type-A 10Gbps signaling rate (HP Sleep and Charge) <sup>(64)</sup> • 1 headphone/microphone combo
<b>Dimensions</b>	• <b>Unpackaged:</b> 11.73 in (W) x 8.68 in (D) x 0.67 in (H) • <b>Packaged:</b> 15.16 in (L) x 5.83 in (W) x 12.40 in (H)
<b>Weight</b>	• <b>Unpackaged:</b> 3.01 lb <sup>(76)</sup> • <b>Packaged:</b> 7.52 lb
<b>Security</b>	• Fingerprint reader • All-in-One Keyboard: Support power button, HP hotkey, camera shutter key, mic mute key, and fingerprint reader in keyboard area.
<b>Power</b>	• 4-cell 66 Wh Li-ion polymer battery <sup>(21)</sup> • 65 W USB Type-C® power adapter <sup>(42)</sup>
<b>Warranty and support</b>	• 1-year limited hardware warranty. Additional information available at <a href="http://www.support.hp.com">www.support.hp.com</a> <sup>(5)</sup> • 1-year limited technical support for software and initial setup (from date of purchase) <sup>(53)</sup>

**Learn more at [hp.com](http://hp.com)**

<sup>(1)</sup> 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>. <sup>(2a)</sup> 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. <sup>(2b)</sup> Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See [intel.com/technology/turboboost](http://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. <sup>(74)</sup> 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. <sup>(8)</sup> 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. <sup>(9)</sup> Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. <sup>(12)</sup> Graphics output may be limited based on the maximum resolution of the display. <sup>(14a)</sup> Shared video memory (UMA) uses part of the total system memory for video performance. System memory dedicated to video performance is not available for other use by other programs. <sup>(14b)</sup> 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. <sup>(15)</sup> Actual formatted capacity is less. Portion of internal storage is reserved for preloaded content. <sup>(18)</sup> Duet for HP is 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. <sup>(19c)</sup> 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. <sup>(20)</sup> All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. <sup>(21)</sup> 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. <sup>(22)</sup> 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](http://dropbox.com). Internet service required and not included. <sup>(23)</sup> HP BIOS Protection works with Windows 11 that ships with your PC. <sup>(25)</sup> 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. <sup>(26)</sup> Bluetooth® is a trademark owned by its proprietor and used by HP Inc. under license. <sup>(27)</sup> Based on U.S. EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit [www.epeat.net](http://www.epeat.net) for more information. <sup>(34)</sup> DisplayHDR™ is the high-performance Monitor and Display Compliance Test Specification from VESA specifying HDR (High Dynamic Range) quality. See [displayhdr.org](http://displayhdr.org) for more details. <sup>(40)</sup> Percent of active plus nonactive viewing area to active viewing area plus border. Measure with lid vertical to the desk. <sup>(42)</sup> USB Type-C® and USB-C® are trademarks of USB Implementers Forum. <sup>(43)</sup> Actual throughput may vary. <sup>(50)</sup> DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. <sup>(51)</sup> Thunderbolt is a trademark of Intel Corporation or its subsidiaries in the U.S. and/or other countries. <sup>(53)</sup> Call 1.800.474.6836 or [support.hp.com](http://support.hp.com) for more information on Care Packs available after standard warranty expires. After standard warranty expires, an incident fee may apply. <sup>(54)</sup> For more information visit [hp.com/go/hpsupportassistant](http://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. <sup>(58a)</sup> Based on HP internal testing using CrystalDiskMark benchmarking software. Performance is sequentially read compared to SATA SSD. <sup>(62)</sup> ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency. <sup>(63a)</sup> Keyboard scissors contain natural, renewable feedstock based on mass balance approach. <sup>(63b)</sup> Percentage of post-consumer recycled plastic contained in keycaps varies by product. <sup>(63c)</sup> Percentage of ocean-bound plastic contained in each component varies by product. <sup>(63d)</sup> Percentage of recycled metal varies by product. <sup>(63e)</sup> 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. <sup>(64)</sup> For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device. <sup>(75)</sup> Battery life tested by HP using continuous FHD video playback, 1080p (1920x1080) 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. <sup>(76)</sup> Weight and system dimensions may fluctuate due to configuration and manufacturing variances. <sup>(78)</sup> 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. <sup>(80)</sup> Battery life tested by HP using continuous Netflix video playback, Microsoft Edge Browser, 150 nits brightness, system audio level 17%, headphone attached, played full-screen, wireless on. Actual battery life will vary depending on configuration and maximum capacity will naturally decrease with time and usage. <sup>(85)</sup> 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/](http://bapco.com/products/mobilemark-2018/) for additional details. <sup>(88a)</sup> 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. <sup>(89)</sup> Features may require software or other 3rd party applications to provide the described functionality. Internet service required and not included. <sup>(99a)</sup> Camera resolution refers to the image sensor active pixels. The actual image capture pixels depend on the app and/or aspect ratio selected. <sup>(90)</sup> 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](http://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 additional 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. 01/11/2023\_r1 ja

**Software**

<b>Help and support</b>	• <b>myHP:</b> myHP provides a simple setup and registration experience that welcomes you to your new HP PC. Customize, optimize, and secure your device with tips and tricks and easy-to-access settings, and receive helpful messages and information to keep things running smoothly. • <b>HP Support Assistant:</b> Included with your computer, this free self-help tool makes it easier than ever to get help with your HP PC and printers. <sup>(56)</sup>
<b>Security and protection</b>	• <b>HP BIOS Protection:</b> Get peace of mind knowing your PC BIOS is protected. HP BIOS Protection automatically checks its health and recovers itself. <sup>(23)</sup> • <b>Fingerprint reader:</b> Securely log in with a touch of your finger. <sup>(9)</sup>
<b>Partner offers</b>	• <b>Adobe Offer:</b> Get a complimentary 1 month trial of the best creativity 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. <sup>(88a)</sup> • <b>Dropbox cloud storage:</b> Store and synchronize your content online with Dropbox. Get 100GB of storage for one year to access, manage, and share your photos, music, and files from anywhere with Internet access. <sup>(9)(22)</sup> • <b>McAfee LiveSafe™:</b> Protect your operating system with a free 30-day McAfee LiveSafe™ trial. <sup>(8)</sup>
<b>System performance</b>	• <b>HP Command Center:</b> Customize performance, fan speed and noise, and external temperature—all to meet your needs. • <b>HP Display Control – Auto Color:</b> 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. • <b>HP Connection Optimizer:</b> Get consistent and reliable Wi-Fi performance with software that automatically switches between the most efficient wireless access points. <sup>(9)</sup>
<b>Work and lifestyle</b>	• <b>HP Adaptive Color:</b> Easy on the eyes - Adaptive Color automatically adjusts display color and brightness based on your environment for more comfortable viewing. To ease eye strain, the display shows a cooler light when it's daytime and gets warmer when the sun goes down. • <b>HP Enhanced Lighting:</b> Easily enhance brightness, color and lighting effects to look your best during video calls with integrated HP Enhanced Lighting app. • <b>Duet® for HP:</b> Use your tablet, phone, or another PC as a secondary display to expand your working space. <sup>(18)</sup> • <b>HP GlamCam:</b> Focus on what you're saying, 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. • <b>AI Noise Removal:</b> Artificial intelligent technology automatically removes background noise for clearer than ever video chats, audio calls, and recordings. • <b>Intel® Unison™:</b> Unlock your connected world and enjoy the freedom to work across operating systems. Intel® Unison™ seamlessly connects your PC and devices for a universal, easy to use experience. <sup>(90)</sup>
<b>Gaming and entertainment</b>	• <b>OMEN Gaming Hub:</b> 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 an easy and simple way.
<b>Additional Information</b>	
<b>Product number</b>	• 7H4FOU#ABA
<b>Ad embargo date</b>	• 04/02/2023
<b>UPC Code</b>	• 197192401330
<b>Country of origin</b>	• China
<b>Pallet information</b>	• <b>Dimensions:</b> 47.24 in (L) x 39.37 in (W) x 42.30 in (H) • <b>Total weight:</b> 440.0 lb • <b>Layers:</b> 3 • <b>Products per layer:</b> 54

