HP Envy Laptop 16-h1023dx (7Z0P3UA)

Overview

Power, mobility, and seamless creativity anywhere

Experience seamless connectivity with the HP Envy 16". Combine the creative power of your devices and enjoy the ultimate color accuracy on a 16" display. Plus, with the Intel® Processor[1], it can handle what you throw at it. Look and sound your best on video calls with a 5MP camera[2] with Auto Frame, plus AI Noise Reduction.

Help protect our shared future

Because better feels better, we've included ocean-bound plastics and recycled aluminum[3] in this PC design.

Look your best on video calls

Experience clear video chats with AI Noise Reduction, and a 5MP camera[2] with Auto Frame plus a privacy shutter.

Powerful tools for creating

Experience the ultimate color accuracy on a 16" screen and power from the Intel® Processor[1].

Features

Windows 11

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.[4]

Extend beyond performance to let your PC do even more at once

Offering more than just a performance score. 13th Gen Intel® Core™ Processors advance real-world computing and deliver more ultra-efficient multi-tasking.[5]

Exceptional experience, anywhere

The Intel® Evo™ platform brings together the perfect combination of performance, responsiveness, battery life and stunning visuals in a new class of laptops. These designs are verified by Intel for an exceptional laptop experience, anywhere.[6]

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.

100% sRGB

Showcase your creations in all their colors on the 100% sRGB display for maximum color broadness and accuracy.

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.[7]

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[1] Multi-core is designed to improve the performance of certain software products. Not all customers or software applications will necessarily benefit from the 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.

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

[3] Laptops manufactured with recycled ocean-bound plastic material in product speaker enclosures and bezel, recycled aluminum material in product cover and post-consumer recycled plastic in the keyboard caps. Percent of recycled materials contained in each component varies by product.

[4] 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.

[5] 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.

[6] Intel and Core are trademarks of Intel Corporation in the U.S. and other countries.

[7] The flicker-free capability eliminates screen flickering through integrating DC-dimming LED backlights.

Specifications

Operating system	Windows 11 Home
Product color	Natural silver aluminum
Processor family	13th Generation Intel® Core™ i9 processor
Processor	Intel® Core™ i9-13900H (up to 5.4 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 14 cores, 20 threads)[6,7]
Chipset	Intel® integrated SoC
Memory	16 GB DDR5-5200 MHz RAM (2 x 8 GB)
Internal Storage	1 TB PCIe® Gen4 NVMe™ TLC M.2 SSD
Product design	Sandblasted, anodized finish
Graphics	Integrated
Graphics (integrated)	Intel® Iris® Xᵉ Graphics
Display	40.6 cm (16") diagonal, WQXGA (2560 x 1600), multitouch-enabled, 120 Hz, IPS, edge-to-edge glass, micro-edge, Low Blue Light, 400 nits, 100% sRGB
Display	16" diagonal, WQXGA (2560 x 1600), multitouch-enabled, 120 Hz, IPS, edge-to-edge glass, micro-edge, Low Blue Light, 400 nits, 100% sRGB
Display size (diagonal)	40.6 cm (16")
Display size (diagonal)	16"
Audio	Audio by Bang & Olufsen; Quad speakers; HP Audio Boost
Minimum dimensions (W x D x H)	35.74 x 25.24 x 1.99 cm
Minimum dimensions (W x D x H)	14.07 x 9.94 x 0.78 in
Weight	Starting at 2.34 kg
Weight	Starting at 5.17 lb
Keyboard	Full-size, backlit, natural silver keyboard
Pointing device	HP Imagepad
Input devices	Accelerometer; Ambient light sensor; IR thermal sensor
Camera	HP True Vision 5MP IR camera with camera shutter, temporal noise reduction and integrated dual array digital microphones
Ports	1 USB Type-A 10Gbps signaling rate; 1 USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 2 Thunderbolt™ 4 with USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo[19,42]
Expansion slots	1 microSD media card reader
Package dimensions (W x D x H)	6.9 x 59.8 x 34.5 cm
Package weight	3.71 kg

Wireless	Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.3 wireless card (supporting gigabit data rate)
Power supply type	200 W Smart AC power adapter
Battery type	6-cell, 83 Wh Li-ion polymer *([23])*
Battery life	Up to 10 hours and 15 minutes[3]
Battery recharge time	Supports battery fast charge: approximately 50% in 30 minutes[5]
Ecolabels	EPEAT® Gold registered
Energy star certified	ENERGY STAR® certified
Sustainable impact specifications	Ocean-bound plastic in bezel, speaker enclosure(s) and hinge cap(s); Recycled metal in cover, keyboard frame and base; Keyboard keycaps and scissors contain post-consumer recycled plastic
Security management	All-in-One keyboard; Trusted Platform Module (Firmware TPM) support
Software included	McAfee LiveSafe™
Software - Productivity & finance	1 month trial for new Microsoft 365 customers[24]
Cloud service	25 GB Dropbox storage for 12 months[1]
UPC number	197497073423

Additional specifications

Aspect ratio	16:10
Battery capacity	83
Battery capacity uom	Wh
Battery cells number	6
Battery life video playback	Up to 16 hours and 45 minutes
Battery type	Li-ion polymer
Bluetooth version	Bluetooth® 5.3
Brightness	400 nits
Camera Infrared	IR
Camera brand	HP True Vision
Camera microphone	integrated dual array digital microphones
Camera resolution	5
Camera resolution uom	MP
Camera security	camera shutter
Color	Natural silver
Color gamut	100% sRGB
Display	40.6 cm (16") diagonal WQXGA touch display
Display	16" diagonal WQXGA touch display
Display bezel	micro-edge
Display brightness	400
Display brightness uom	nits
Display design	edge-to-edge glass
Display panel technology	IPS
Display refresh rate	120
Display refresh rate uom	Hz
Display resolution (pixels)	2560 x 1600
Display resolution standard	WQXGA
Display size (diagonal) uom	"
Display size (diagonal, imperial)	16
Display size (diagonal, metric)	40.6
Display size (diagonal, metric) uom	cm
Display touchscreen type	touch screen

Flicker-free	Yes[45]
Graphics	Discrete
Graphics (discrete)	NVIDIA® GeForce RTX™ 4060 Laptop GPU (8 GB GDDR6 dedicated)
Graphics card brand	NVIDIA®
Graphics card family	GeForce
Graphics card memory size	8
Graphics card memory size uom	GB
Graphics card memory type	GDDR6
HDMI out – version	2.1
HDMI –out	1
Headphone/microphone combo	1
Keyboard backlight	backlit
Keyboard color	natural silver
Keyboard size	Full-size
Memory and storage	16 GB memory; 1 TB SSD storage
Memory layout (slots & size)	2 x 8 GB
Memory module type	DIMM
Memory size	16
Memory size uom	GB
Memory speed	5200
Memory speed uom	MHz
Memory type	DDR5
Model Number	RTX™ 4060
Number of User-accessible Memory Slots	2
Number of memory slots	2
Package depth, imperial (most common size)	23.54
Package depth, metric (most common size)	59.8
Package dimensions (W x D x H)	2.71 x 23.54 x 13.58 in
Package height, imperial (most common size)	13.58
Package height, metric (most common size)	34.5
Package weight	8.18 lb
Package width, imperial (most common size)	2.71

Package width, metric (most common size)	6.9
Packaging unit of measure (imperial)	in
Packaging unit of measure (metric)	cm
Performance technology	Intel® Evo™ laptop
Playbook TS icon OS	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905482.png
Playbook TS icon battery life	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905264.png
Playbook TS icon connectivity	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201987.png
Playbook TS icon dimensions NB	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08250394.png
Playbook TS icon display NB	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08205649.png
Playbook TS icon graphics	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08169202.png
Playbook TS icon memory	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08267700.png
Playbook TS icon processor	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201972.png
Playbook TS icon storage	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08192819.png
Playbook TS icon weight imperial	http://h10003.www1.hp.com/digmedialib/prodimg/lowres/c05790117.png
Playbook TS icon weight metric	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08267650.png
Processor Brand	Intel®
Processor cache	24 MB L3
Processor core	14
Processor family	Core™ i9
Processor frequency technology	Intel® Turbo Boost Technology
Processor generation	13th Generation
Processor maximum frequency	5.4
Processor maximum frequency uom	GHz
Processor model	13900H
Processor threads	20
Product brand name	HP
Product long name specifications	HP Envy Laptop 16-h1023dx, Windows 11 Home, 16", touch screen, Intel® Core™ i9, 16GB RAM, 1TB SSD, NVIDIA® GeForce RTX™ 4060, WQXGA, Natural silver
Product long name specifications V2	HP Envy Laptop 16, Windows 11 Home, 16", touch screen, Intel® Core™ i9, 16GB RAM, 1TB SSD, NVIDIA® GeForce RTX™ 4060, WQXGA, Natural silver
Product short name specifications	HP Envy Laptop 16-h1023dx, 16", Intel® Core™ i9, 16GB RAM, 1TB SSD
Screen-to-body ratio (without speakers)	88.7%[18]

Storage capacity	1
Storage capacity uom 01	TB
Storage form factor 01	M.2
Storage interface 01	PCIe®
Storage interface protocol 01	NVMe™
Storage memory technology 01	TLC
Storage type	SSD
Storage type 01	SSD
Thunderbolt™ 4 ports	2
Touchscreen	Yes
UNSPSC code	43211503
USB Type-A	2
Wireless Model	Wi-Fi 6E AX211
Wireless antenna	2x2
Wireless standard	Wi-Fi 6E
Wireless supplier	Intel®
Wireless transfer speeds	Supporting Gigabit data rate

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[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.

[3] 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 https://bapco.com/products/mobilemark-2018/ 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.

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[7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost/ for more information.

[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.

[24] Must activate within 180 days of Windows activation.

[42] For optimal performance and battery chargeability while gaming and rendering, use the power adapter that ships with the PC. You can use the 100W/20V Type-C adapter or power bank when running light loading tasks. System-off charging is only supported on 20V Type-C adapter or power bank.

[45] Coverage and Throughput improvements with Dynamic Antenna Gain feature enabled based on outdoor free space environment using Friis formula. Dynamic Antenna Gain is a feature under HP Extended Range Wireless Lan. Dynamic Antenna Gain feature is available in EU Red Countries covered by EU and China approval.

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