



HyperX OMEN 15 inch Gaming Laptop PC 15-ga0023TX (D2KR4PA)

Overview

Play past ordinary

The HyperX OMEN 15 delivers fast performance that pushes your gaming farther than ever. With NVIDIA® GeForce RTX™ 50 Series GPUs and Intel® Core™ CPUs [2], Unleashed Mode for manual overclocking, and with a single click on OMEN AI, you can maximize your FPS without the hassle.



Performance on your terms

Performance made to keep you playing with NVIDIA® GeForce RTX™ GPUs and the latest Intel® Core™ CPUs [2].



Faster moves for when it matters

React fast in the heat of the game on a bigger screen that pulls you into the action.



Never slow down

OMEN Tempest Cooling keeps you strong all day with dust-free internals and optimized airflow.



Your style in RGB Colors

Effortlessly personalize, tune, and optimize your laptop with OMEN Gaming Hub.

Features



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.^[1]



Game Changer

Powered by NVIDIA Blackwell, GeForce RTX™ 50 Series Laptop GPUs bring game-changing AI capabilities to gamers and creators. Multiply performance with NVIDIA DLSS 4, generate images at unprecedented speed, and unleash your creativity with NVIDIA Studio.^[4]

3ms response time

How fast your display's pixels respond is crucial for a smooth picture. With a 3-millisecond response time, your action-filled content will look crisp and fluid without motion blur.^[6]



For every gamer, everywhere

Newly improved performance hybrid architecture will push your gaming experience beyond expectations. Intel® Core processors feature performance hybrid architecture that makes it easy to game, stream, and create at the same time^[3]

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.^[5]

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]

[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, 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.

[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://www.windows.com>.

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

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[5] All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. Eyesafe® Display for Low Blue Light is the Display Compliance Test Specification quality. See <https://eyesafe.com> for more details. Display measured diagonally

[6] All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary, either higher or lower.

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

Specifications

Operating System Software	Windows 11 Home
Product Color Description (fixed)	Shadow black
Processor Family	Intel® Core™ i5 14th generation processor
Processor Name	Intel® Core™ i5-14500HX (up to 4.9 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 14 cores, 20 threads) ^[6,7]
Chipset	Intel® HM770
Standard Memory Description 01	16 GB DDR5-5600 MT/s (1 x 16 GB)
Hard Drive Description (01)	1 TB PCIe® Gen4 NVMe™ M.2 SSD
Product Design	Polished paint finish
Graphics Card Segment 02	Discrete
GScardseg 02 Available Card 01	NVIDIA® GeForce RTX™ 5050 Laptop GPU (8 GB GDDR7 dedicated)
Graphics Card Segment 01	Integrated
GScardseg 01 Available Card 01	Intel® UHD Graphics
Display Description (metric)	38.9 cm (15.3") diagonal, 2.5K (2560 x 1600), up to 180 Hz, 3 ms response time, IPS, micro-edge, anti-glare, Low Blue Light, 500 nits, 100% sRGB
Display Description	15.3" diagonal, 2.5K (2560 x 1600), up to 180 Hz, 3 ms response time, IPS, micro-edge, anti-glare, Low Blue Light, 500 nits, 100% sRGB
Display Size (diagonal, metric)	38.9 cm (15.3")
Display Size (diagonal)	15.3"
Audio Features	DTS:X® Ultra; Dual speakers; HP Audio Boost; HyperX
Product Dimensions (metric)	Starting at 34.3 x 25.3 x 2.25 cm (front); Starting at 34.3 x 25.3 x 2.36 cm (rear)
Product Dimensions (imperial)	Starting at 13.5 x 9.96 x 0.89 in (front); Starting at 13.5 x 9.96 x 0.93 in (rear)
Weight (metric)	Starting at 2.21 kg
Keyboard	Full-size, 4-zone RGB backlit, shadow black keyboard with numeric keypad and 26-Key Rollover Anti-Ghosting Key technology
Pointing Device	HP Imagepad
Camera	1080p FHD camera with HDR auto switch, temporal noise reduction and integrated dual array digital microphones
External I/O Ports	2 USB Type-A 10Gbps signaling rate; 1 AC smart pin; 1 HDMI-out 2.1; 1 headphone/microphone combo; 1 RJ-45; 1 USB Type-C® 10Gbps signaling rate (USB Power Delivery 3.1, DisplayPort™ 1.4, HP Sleep and Charge) ^[19,42]
Expansion Slots	2 M.2 (SSD)
Package Dimensions (metric)	6.3 x 56.7 x 33 cm
Package Weight (metric)	3.77 kg

Network Interface	Integrated 10/100/1000 GbE LAN
Wireless Technologies	Realtek Wi-Fi 6 (2x2) and Bluetooth® 5.4 wireless card ^[12,46]
Power Supply Type	230 W AC power adapter
Battery Type	4-cell, 70 Wh Li-ion polymer (<i>[23]</i>)
Battery Recharge Time	Supports battery fast charge: approximately 50% in 30 minutes ^[5]
Sustainable Impact Specifications	Keyboard keycaps, scissors and keyboard plate contain post-consumer recycled plastic
Security Management	Trusted Platform Module (Firmware TPM) support
Software Included	McAfee Online Protection 30-day trial
Software - Productivity & Finance	1 month trial for new Microsoft 365 customers ^[24]
Cloud Service	100 GB Dropbox storage for 3 months ^[1]
UPC Number	199896333467

Additional specifications

ALC Package depth, metric	56.7
ALC Package height, metric	33
ALC Package width, metric	6.3
Aspect Ratio	16:10
Battery Capacity	70
Battery Capacity UOM	Wh
Battery Cells Number	4
Battery Type	Li-ion polymer
Bluetooth Version	Bluetooth® 5.4
Brightness (typical)	500 nits
Camera Microphone	integrated dual array digital microphones
Camera Resolution (Vertical)	1080p
Camera Resolution Standard	FHD
Color	Shadow black
Display Brightness	500
Display Brightness UOM	nits
Display Color Gamut	100% sRGB
Display Description Short	15.3" diagonal 2.5K display
Display Description Short (metric)	38.9 cm (15.3") diagonal 2.5K display
Display Panel Technology	IPS
Display Refresh Rate	180
Display Refresh Rate UOM	Hz
Display Resolution (Pixels)	2560 x 1600
Display Resolution Standard	2.5K
Display Response Time	3
Display Response Time UOM	ms
Display Size (Diagonal)	15.3
Display Size (Diagonal) UOM	"
Display Size (Diagonal, Metric)	38.9
Display Size (Diagonal, Metric) UOM	cm
Display Surface Treatment	Anti-glare
ECC Memory	non-ECC

Ethernet (RJ-45)	1
Flicker-Free	Yes ^[53]
Graphics Discrete Brand	NVIDIA®
Graphics Discrete Family	GeForce
Graphics Discrete Memory Size	8
Graphics Discrete Memory Size UOM	GB
Graphics Discrete Memory Type	GDDR7
Graphics Discrete Model Number	RTX™ 5050
HDMI out – version	2.1
HDMI –out	1
Headphone/microphone combo	1
Keyboard Backlight	RGB backlit
Keyboard Backlit Zone	4-zone
Keyboard Color	Shadow black
Keyboard Keypad	Numeric keypad
Keyboard Technology	26-Key Rollover Anti-Ghosting Key technology
Keyboard size	Full-size
Memory Layout (Slots & Size)	1 x 16 GB
Memory Module Type	SODIMM
Memory Size	16
Memory Size UOM	GB
Memory Slots Number	1
Memory Speed	5600
Memory Speed UOM	MT/s
Memory Storage Simplified	16 GB memory;1 TB SSD storage
Memory Type	DDR5
Number of User-accessible Memory Slots	2
Package Dimensions (imperial)	2.48 x 22.32 x 12.99 in
Package Weight (imperial)	8.33 lb
Package depth, imperial (ALC)	22.32
Package height, imperial (ALC)	12.99
Package width, imperial (ALC)	2.48
Packaging unit of measure (imperial)	in

Packaging unit of measure (metric)	cm
Playbook TS Icon Battery Life	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905264.png
Playbook TS Icon Connectivity	https://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	https://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 OS	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c03905482.png
Playbook TS Icon Processor	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08201972.png
Playbook TS Icon Storage	https://h10003.www1.hp.com/digmedialib/prodimg/lowres/c08192819.png
Playbook TS Icon Weight Imperial	https://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 Installed	24 MB L3
Processor Core	14
Processor Family (Short)	Core™ i5
Processor Frequency Technology	Intel® Turbo Boost Technology
Processor Generation	14th Generation
Processor Maximum Frequency	4.9
Processor Maximum Frequency UOM	GHz
Processor Model	14450HX
Processor Threads	20
Product Brand Name	HP
Product Long Name Specifications	HyperX OMEN 15 inch Gaming Laptop PC 15-ga0023TX, Windows 11 Home, 15.3", Intel® Core™ i5, 16GB RAM, 1TB SSD, NVIDIA® GeForce RTX™ 5050, 2.5K, Shadow black
Product Long Name Specifications V2	HyperX OMEN 15 inch Gaming Laptop PC 15, Windows 11 Home, 15.3", Intel® Core™ i5, 16GB RAM, 1TB SSD, NVIDIA® GeForce RTX™ 5050, 2.5K, Shadow black
Product Short Name Specifications	HyperX OMEN 15 inch Gaming Laptop PC 15-ga0023TX, 15.3", Intel® Core™ i5, 16GB RAM, 1TB SSD
Screen-To-Body Ratio (without speakers)	91% ^[18]
Storage Capacity 01	1
Storage Capacity UOM 01	TB
Storage Form Factor 01	M.2

Storage Interface 01	PCIe® Gen 4
Storage Interface Protocol 01	NVMe™
Storage Type 01	SSD
Storage type (filter)	SSD
Touchscreen	No
UNSPSC Code	43211503
USB Type-A	2
USB Type-C	1
Wireless Antenna	2x2
Wireless Standard	Wi-Fi 6
Wireless Supplier	Realtek

[1] 100 GB of free Dropbox storage for 3 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.

[5] 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 vary +/-10% due to System tolerance. Available on select HP products.

[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.

[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. 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).

[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.

[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.

[53] 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.

Accessories for PC

Port Replicators/Dongles/Docking

★ : Recommended

Docking

HP USB-C 100W G6 Dock	BS7S5AA
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HyperX Gaming Peripherals

HyperX Earbuds

★ : Recommended

HyperX Cloud Earbuds SC

HyperX Cloud Earbuds III S Black

BN7S1AA

HyperX Cloud Earbuds III S Red

BN7S2AA

HyperX Gaming Headsets

HyperX Cloud Stinger Headsets SC

HyperX Cloud Stinger 3 Gaming Headset

BS1T5AA

HyperX Gaming Controllers

HyperX Clutch Controllers SC

HyperX Clutch Tachi - Xbox

B11D9AA

HyperX Gaming Keyboards

HyperX Eve Keyboards SC

HyperX Eve 1800 - Gaming Keyboard

B7JE0AA

HyperX Origins 2 Keyboards SC

HyperX Origins 2 Pro 65

BN7S3AA

Monitors

HP Home Monitors

★ : Recommended

OMEN by HP Displays

HyperX OMEN 23.8 inch FHD 180Hz Gaming Monitor - OMEN 24 G2	C2JP4AA
HyperX OMEN 23.8 inch FHD 180Hz Gaming Monitor - OMEN 24 G2	C2JP4AS
HyperX OMEN 23.8 inch FHD 180Hz Gaming Monitor - OMEN 24 G2	C2JP4E9
HyperX OMEN OLED 27 inch QHD 240Hz Gaming Monitor - OMEN OLED 27q	CH0R2AA
HyperX OMEN OLED 27 inch QHD 240Hz Gaming Monitor - OMEN OLED 27q	CH0R2AS
HyperX OMEN OLED 27 inch QHD 240Hz Gaming Monitor - OMEN OLED 27q	CH0R2E9
HyperX OMEN OLED 27 inch QHD 500Hz Gaming Monitor - OMEN OLED 27qs	BY8Z1AA
HyperX OMEN OLED 27 inch QHD 500Hz Gaming Monitor - OMEN OLED 27qs	BY8Z1AS
HyperX OMEN OLED 27 inch QHD 500Hz Gaming Monitor - OMEN OLED 27qs	BY8Z1E9
OMEN 24.5inch FHD 360Hz Gaming Monitor - OMEN 25	BG1M4AA
OMEN 24.5inch FHD 360Hz Gaming Monitor - OMEN 25	BG1M4E9
OMEN 27 inch FHD 180Hz Gaming Monitor - OMEN 27 G2	AV4K1AA
OMEN 27 inch FHD 180Hz Gaming Monitor - OMEN 27 G2	AV4K1AS
OMEN 27 inch FHD 180Hz Gaming Monitor - OMEN 27 G2	AV4K1E9
OMEN 27 inch FHD 180Hz Gaming Monitor - OMEN 27 G2	AV4K2A6
OMEN 27 inch FHD 180Hz Gaming Monitor - OMEN 27 G2	AV4K2AA
OMEN 27 inch QHD 180Hz Gaming Monitor - OMEN 27q G2	AV4H6AA
OMEN 27 inch QHD 180Hz Gaming Monitor - OMEN 27q G2	AV4H6AS
OMEN 27 inch QHD 180Hz Gaming Monitor - OMEN 27q G2	AV4H6E9
OMEN 27 inch QHD 180Hz Gaming Monitor - OMEN 27q G2	AV4H7A6
OMEN 27 inch QHD 180Hz Gaming Monitor - OMEN 27q G2	AV4H7AA
OMEN 27 inch QHD 280Hz Gaming Monitor - OMEN 27qs G2	AW3V0AA
OMEN 27 inch QHD 280Hz Gaming Monitor - OMEN 27qs G2	AW3V0AS
OMEN 27 inch QHD 280Hz Gaming Monitor - OMEN 27qs G2	AW3V0E9
OMEN 27 inch QHD 280Hz Gaming Monitor - OMEN 27qs G2	AW3V1A6
OMEN 27 inch QHD 280Hz Gaming Monitor - OMEN 27qs G2	AW3V1AA
OMEN 34 inch WQHD 180Hz Curved Gaming Monitor - OMEN 34c G2	AV4C1AA
OMEN 34 inch WQHD 180Hz Curved Gaming Monitor - OMEN 34c G2	AV4C1AS
OMEN 34 inch WQHD 180Hz Curved Gaming Monitor - OMEN 34c G2	AV4C1E9
OMEN 34 inch WQHD 180Hz Curved Gaming Monitor - OMEN 34c G2	AV4E7A6

OMEN 34 inch WQHD 180Hz Curved Gaming Monitor - OMEN 34c G2	AV4E7AA	
OMEN Transcend 31.5 inch UHD 240Hz OLED Gaming Monitor - OMEN Transcend 32	9R181AA	
OMEN Transcend 31.5 inch UHD 240Hz OLED Gaming Monitor - OMEN Transcend 32	9R181E9	
OMEN by HP 23.8 inch FHD 165Hz Gaming Monitor - OMEN 24	780D9AA	
OMEN by HP 23.8 inch FHD 165Hz Gaming Monitor - OMEN 24	780D9AS	
OMEN by HP 23.8 inch FHD 165Hz Gaming Monitor - OMEN 24	780D9E9	
OMEN by HP 23.8 inch FHD 165Hz Gaming Monitor - OMEN 24	780F0A6	
OMEN by HP 23.8 inch FHD 165Hz Gaming Monitor - OMEN 24	780F0AA	
OMEN by HP 27 inch FHD 165Hz Gaming Monitor - OMEN 27	780F9AA	
OMEN by HP 27 inch FHD 240Hz Gaming Monitor - OMEN 27s	780G5AA	obsolete
OMEN by HP 27 inch FHD 240Hz Gaming Monitor - OMEN 27s	780G5AS	obsolete
OMEN by HP 27 inch FHD 240Hz Gaming Monitor - OMEN 27s	780G5E9	obsolete
OMEN by HP 27 inch FHD 240Hz Gaming Monitor - OMEN 27s	780G6AA	
OMEN by HP 27 inch QHD 165Hz Gaming Monitor - OMEN 27q	780H4AA	
OMEN by HP 27 inch QHD 240Hz Gaming Monitor - OMEN 27qs	780J4AA	
OMEN by HP 27 inch UHD 144Hz Gaming Monitor - OMEN 27k	780G8AA	
OMEN by HP 27 inch UHD 144Hz Gaming Monitor - OMEN 27k	780G8AS	
OMEN by HP 27 inch UHD 144Hz Gaming Monitor - OMEN 27k	780G8E9	
OMEN by HP 27 inch UHD 144Hz Gaming Monitor - OMEN 27k	780G9AA	
OMEN by HP 31.5 inch QHD 165Hz Curved Gaming Monitor - OMEN 32c	780K6AA	
OMEN by HP 31.5 inch QHD 165Hz Curved Gaming Monitor - OMEN 32c	780K6AS	
OMEN by HP 31.5 inch QHD 165Hz Curved Gaming Monitor - OMEN 32c	780K6E9	
OMEN by HP 31.5 inch QHD 165Hz Curved Gaming Monitor - OMEN 32c	780K7A6	
OMEN by HP 31.5 inch QHD 165Hz Curved Gaming Monitor - OMEN 32c	780K7AA	
OMEN by HP 31.5 inch QHD 165Hz Gaming Monitor - OMEN 32q	780K0AA	
OMEN by HP 31.5 inch QHD 165Hz Gaming Monitor - OMEN 32q	780K0AS	
OMEN by HP 31.5 inch QHD 165Hz Gaming Monitor - OMEN 32q	780K0E9	
OMEN by HP 31.5 inch QHD 165Hz Gaming Monitor - OMEN 32q	780K1AA	
OMEN by HP 31.5 inch UHD 144Hz Smart Gaming Monitor - OMEN 32x	99Z68AA	
OMEN by HP 31.5 inch UHD 144Hz Smart Gaming Monitor - OMEN 32x	99Z68AS	
OMEN by HP 31.5 inch UHD 144Hz Smart Gaming Monitor - OMEN 32x	99Z68E9	
OMEN by HP 31.5 inch UHD 144Hz Smart Gaming Monitor - OMEN 32x	99Z69AA	
OMEN by HP 34 inch WQHD 165Hz Curved Gaming Monitor - OMEN 34c	780K8AA	

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