



OMEN MAX 45L Gaming DT GT23-0013a PC (D89SRPA)



Overview

Unmatched cooling. Untouchable performance

The OMEN MAX 45L is the best gaming desktop for gamers looking for maximum FPS. With the latest graphics cards and AMD Ryzen™ 9000 CPUs[1], a new Extreme Mode for manual overclocking, and a patented cooling system, Cryo Chamber™, built to keep your CPU ice cold, the MAX 45L is an absolute force of nature.



Market-Best performance

Easily achieve MAX performance with AMD Ryzen™ 9000 CPUs[1] and the latest graphics cards.



Welcome to MAX

Manually overclock your CPU and GPU with Extreme Mode and Advanced Performance Tuning for MAX FPS.



One-of-a-kind cooling

Thanks to MAX 45L's patented Cryo Chamber™, our CPUs are up to 7.5% cooler than leading competitors.



Designed to evolve

Built entirely from industry standard components, which means upgrading your rig has never been easier.

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.^[2]



Game Changer

Powered by NVIDIA Blackwell, GeForce RTX™ 50 Series 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]



DTS: X[®] Ultra Technology

By producing authentic, spatially accurate 3D sound through any headset, this technology offers specially tuned audio modes for different game types to provide immersion for the best entertainment experience possible.^[5]



Surpass Ordinary Play Extraordinary

Discover your greatness with the AMD Ryzen™ 9000 Series pushing gaming and content creation to the next level with 'Zen 5' architecture and AMD EXPO, making one-touch memory overclocking simple for the best possible experience.^[3]



PCIe NVMe™ M.2 SSD storage

Boot up in seconds with lightning fast speed with up to 2 TB PCIe NVMe™ M.2 SSD storage.



USB Type-C[®] 10Gbps signaling data rate

Plug in your external storage with this USB Type-C[®] port, featuring 10Gbps signaling data rate. And it's reversible, so you never have to worry about plugging in upside down.^[6]

[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. Max Boost clock frequency performance varies depending on hardware, software and overall system configuration.

[2] 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. AMD's numbering is not a measurement of clock speed.

[4] ©2025 NVIDIA Corporation. NVIDIA, the NVIDIA logo, GeForce, and GeForce RTX are registered trademarks and/or trademarks of NVIDIA Corporation in the United States and other countries. All other trademarks and copyrights are the property of their respective owners.

[5] Listening to personal stereo equipment at full volume for long periods can damage the user's hearing. To reduce the risk of hearing damage, lower the volume and amount of time listening at full volume.

[6] Actual throughput may vary. USB Type-C® and USB-C® are trademarks of USB Implementers Forum.

Specifications

Form Factor	microATX
Operating System Software	Windows 11 Home
Product Color Description (fixed)	Shadow black glass front bezel, glass side panel, white logo
Processor Family	AMD Ryzen™ 9 processor
Processor Name	AMD Ryzen™ 9 9950X3D (up to 5.7 GHz max boost clock, 128 MB L3 cache, 16 cores, 32 threads) ^[6,7]
Chipset	AMD B850
Standard Memory Description 01	Kingston FURY 32 GB DDR5-6000 MT/s EXPO™ RGB Heatsink (2 x 16 GB)
Memory Slots	4 DIMM
Hard Drive Description (01)	2 TB PCIe® Gen4 NVMe™ M.2 SSD
Product Design	Textured finish
Graphics Card Segment 02	Discrete
GScardseg 02 Available Card 01	NVIDIA® GeForce RTX™ 5090 (32 GB GDDR7 dedicated)
Graphics Card Segment 01	Integrated
GScardseg 01 Available Card 01	AMD Radeon™ Graphics
Audio Features	Omen Audio Control Support DTS:X Ultra
Product Dimensions (metric)	20.4 x 47 x 55.5 cm
Product Dimensions (imperial)	8.03 x 18.5 x 21.85 in
Weight (metric)	22.6 kg
Weight (imperial)	49.82 lb
Video Connectors	1 HDMI 2.1b;3 DisplayPort™ 2.1b
External I/O Ports	1 USB Type-C® 10Gbps signaling rate (HP Sleep and Charge); 2 USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 1 headphone/microphone combo ^[19,52]
Expansion Slots	3 M.2 (2 for SSD, 1 for WLAN); 1 PCIe Gen5 x16; 1 PCIe Gen4 x4
External I/O Ports 02	1 USB Type-C® 10Gbps signaling rate (DisplayPort™ 1.4); 1 USB Type-C® 10Gbps signaling rate; 2 USB Type-A 5Gbps signaling rate; 4 USB 2.0 Type-A; 1 microphone; 1 RJ-45; 1 line in; 1 line out
Package Dimensions (metric)	59.2 x 32.8 x 67.2 cm
Package Weight (metric)	25.2 kg
Network Interface	Realtek RTL8125BGH-CG 10/100/1000/2500 GbE NIC
Wireless Technologies	MediaTek Wi-Fi 7 MT7925 (2x2) and Bluetooth® 5.4 wireless card
Power Supply Type	1200 W Cybenetics Platinum certified ATX 3.1 fully modular power supply
Sustainable Impact Specifications	Water based paint; At least 10% recycled metal; LDPE bag contains 30% recycled plastic; Molded paper pulp cushion inside box is made of 100% recycled or certified sources; At least 20% post-consumer recycled plastic

Security Management

Chassis side cover lock

Software Included

McAfee Online Protection 30-day trial

Software - Productivity & Finance

1 month trial for new Microsoft 365 customers^[24,49,50]

Cloud Service

100 GB Dropbox storage for 3 months^[1]

UPC Number

821844463260

Additional specifications

Bluetooth Version	Bluetooth® 5.4
Color	Shadow black
DisplayPort™	3
DisplayPort™ version	2.1b
ECC Memory	non-ECC
Ethernet (RJ-45)	1
Graphics Discrete Brand	NVIDIA®
Graphics Discrete Family	GeForce
Graphics Discrete Memory Size	32
Graphics Discrete Memory Size UOM	GB
Graphics Discrete Memory Type	GDDR7
Graphics Discrete Model Number	RTX™ 5090
HDMI version	2.1b
HDMI –out	1
Headphone/microphone combo	1
I/O Port Location 01	Top
I/O Port Location 02	Rear
Memory Brand	Kingston FURY
Memory Layout (Slots & Size)	2 x 16 GB
Memory Lighting	RGB
Memory Module Type	UDIMM
Memory Size	32
Memory Size UOM	GB
Memory Slots Number	2
Memory Speed	6000
Memory Speed UOM	MT/s
Memory Storage Simplified	32 GB memory;2 TB SSD storage
Memory Type	DDR5
Package Dimensions (imperial)	23.31 x 12.91 x 26.46 in
Package Weight (imperial)	55.56 lb
Processor Brand	AMD
Processor Cache Installed	128 MB L3
Processor Core	16

Processor Family (Short)	Ryzen™ 9
Processor Maximum Frequency	5.7
Processor Maximum Frequency UOM	GHz
Processor Model	9950X3D
Processor Socket	AM5
Processor Threads	32
Product Brand Name	HP
Product Long Name Specifications	OMEN MAX 45L Gaming DT GT23-0013a PC, Windows 11 Home, AMD Ryzen™ 9, 32GB RAM, 2TB SSD, NVIDIA® GeForce RTX™ 5090, Shadow black
Product Long Name Specifications V2	Windows 11 Home, AMD Ryzen™ 9, 32GB RAM, 2TB SSD, NVIDIA® GeForce RTX™ 5090, Shadow black
Product Short Name Specifications	OMEN MAX 45L Gaming DT GT23-0013a PC, AMD Ryzen™ 9, 32GB RAM, 2TB SSD
Storage Capacity 01	2
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
UNSPSC Code	43211507
USB Type-A	8
USB Type-C	3
Wireless Antenna	2x2
Wireless Model	MT7925
Wireless Standard	Wi-Fi 7
Wireless Supplier	MediaTek

[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.

[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.

[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.

[49] Some Windows 11 features require camera, microphone, speakers and/or advanced hardware. Check www.microsoft.com/windows and/or www.hp.com for details.

[52] Please make sure the USB Charging mode is enabled in the BIOS settings to activate the "HP Sleep and Charge" feature.

HyperX Gaming Peripherals

HyperX Gaming Headsets

★ : Recommended

HyperX Cloud Alpha Headsets SC

HyperX Cloud Alpha 2 - Wireless Gaming Headset

AJ5C7AA

HyperX Cloud Stinger Headsets SC

HyperX Cloud Stinger 3 Gaming Headset

BS1T5AA

HyperX Earbuds

HyperX Cloud Earbuds SC

HyperX Cloud Earbuds III S Black

BN7S1AA

HyperX Cloud Earbuds III S Red

BN7S2AA

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

HyperX Microphones

HyperX USB/XLR Microphones

HyperX FlipCast - USB/XLR Dynamic Microphone (Black)

B2CM1AA

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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