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Acer Predator Helios 16 PH16-72 Gaming Laptop - Intel Core i9-14900HX, 16GB, 1TB SSD, NVIDIA GeForce RTX 4080 12, 16"WQXGA 250Hz MiniLED, Windows 11, Black

Brand : Acer   **Product family:** Predator   **Product code:** NH.QNZEK.002
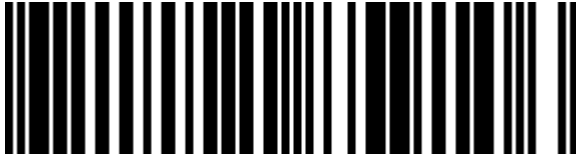
Product name : Acer Predator Helios 16 PH16-72 Gaming Laptop - Intel Core i9-14900HX, 16GB, 1TB SSD, NVIDIA GeForce RTX 4080 12, 16"WQXGA 250Hz MiniLED, Windows 11, Black

- Windows 11 Home 64-bit
- Intel Core i9-14900HX (26MB Cache, 5.7GHz)
- 40.6 cm (16") WQXGA 2560 x 1600 Mini LED, NVIDIA GeForce RTX 4080 (12GB GDDR6)
- 16GB DDR5-SDRAM & 1000GB SSD

Intel Core i9-14900HX (26MB Cache, 5.7GHz), 16GB DDR5-SDRAM, 1000GB SSD, 40.6 cm (16") WQXGA 2560 x 1600 Mini LED, Intel UHD Graphics, NVIDIA GeForce RTX 4080 (12GB GDDR6), LAN, WLAN, Webcam, Windows 11 Home 64-bit

Design

Product type *	Laptop
Product colour *	Black
Form factor *	Clamshell
Market positioning	Gaming
Country of origin	China

Display

Display diagonal *	40.6 cm (16")
Display resolution *	2560 x 1600 pixels
Touchscreen *	✘
HD type	WQXGA
Panel type	Mini LED
LED backlight	✔
Native aspect ratio	16:10
Maximum display brightness (HDR)	1000 cd/m²
Standard Dynamic Range (SDR) brightness	600 cd/m²
RGB colour space	DCI-P3
Colour gamut	100%
Maximum refresh rate	250 Hz

Processor

Processor manufacturer *	Intel
Processor family *	Intel® Core™ i9
Processor generation	Intel® Core™ i9 (14th gen)
Processor model *	i9-14900HX
Processor cores	24
Processor boost frequency	5.8 GHz
Processor frequency *	5.7 GHz
Performance cores	8
Efficient cores	16
Performance-core Max Turbo Frequency	5.8 GHz
Efficient-core Max Turbo Frequency	4.1 GHz

Audio

Audio system	DTS:X Ultra
Built-in microphone	✔
Number of microphones	3

Camera

Front camera	✔
Front camera resolution (numeric)	2 MP
Front camera resolution	1920 x 1080 pixels
Front camera HD type	Full HD

Network

Top Wi-Fi standard *	Wi-Fi 7 (802.11be)
Wi-Fi standards	802.11a, 802.11b, 802.11g, Wi-Fi 4 (802.11n), Wi-Fi 5 (802.11ac), Wi-Fi 6 (802.11ax), Wi-Fi 6E (802.11ax), Wi-Fi 7 (802.11be)
Mobile network connection *	✘
Antenna type	2x2
WLAN controller model	Killer Wi-Fi 7 BE1750
WLAN controller manufacturer	Killer
Ethernet LAN	✔
Ethernet LAN data rates	10,100,1000,2500 Mbit/s
Bluetooth	✔
Bluetooth version	5.3
Bluetooth Low Energy (BLE)	✔
MIMO	✔
MIMO type	Multi User MIMO

Ports & interfaces

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	1
USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity	2
USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity	2
Ethernet LAN (RJ-45) ports	1

Processor

Performance-core base frequency	2.2 GHz
Efficient-core base frequency	1.6 GHz
Processor cache	26 MB
Processor cache type	Smart Cache
Processor base power	55 W
Maximum turbo power	157 W

Memory

Internal memory *	16 GB
Internal memory type	DDR5-SDRAM
Maximum internal memory *	32 GB
Memory data transfer rate	5600 MT/s

Storage

Total storage capacity *	1.02 TB
Storage media *	SSD
Total SSDs capacity	1.02 TB
Number of SSDs installed	1
SSD capacity	1.02 TB
SSD interface	PCI Express 4.0
NVMe	✔
SSD form factor	M.2
Optical drive type *	✘

Graphics

Discrete GPU manufacturer	NVIDIA
Discrete graphics card model *	NVIDIA GeForce RTX 4080
Discrete graphics card memory	12 GB
Discrete graphics memory type	GDDR6
On-board graphics card *	✔
On-board GPU manufacturer	Intel
Discrete graphics card *	✔
On-board graphics card family	Intel® UHD Graphics
On-board graphics card model *	Intel® UHD Graphics
NVIDIA G-SYNC	✔
CUDA	✔
CUDA cores	7424

Ports & interfaces

HDMI ports quantity *	1
HDMI version	2.1
Thunderbolt 4 ports quantity	2
Intel® Thunderbolt 4	✔
Combo headphone/mic port	✔
Charging port type	DC-in jack
USB Type-C DisplayPort Alternate Mode	✔
USB Power Delivery	✔
USB Sleep-and-Charge	✔
USB Sleep-and-Charge ports	1

Keyboard

Pointing device	Touchpad
Keyboard layout	QWERTY
Keyboard language	UK English
Numeric keypad *	✔
Keyboard backlit	✔
Keyboard backlit colour	RGB
Keyboard backlit zone	Per-key RGB
Full-size keyboard	✔

Software

Operating system architecture	64-bit
Operating system installed *	Windows 11 Home

Battery

Battery technology	Lithium-Ion (Li-Ion)
Number of battery cells	4
Battery capacity *	90 Wh
Battery life (max)	6.5 h
Continuous video playback time	6.5 h
Browsing time (Wi-Fi)	6 h

Power

AC adapter power	330 W

Weight & dimensions

Width	357.8 mm
Depth	277.6 mm
Height	24.9 mm
Weight *	2.7 kg

Packaging data

Package width	82 mm
Package depth	599 mm
Package height	392 mm
Package weight	5.66 kg

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