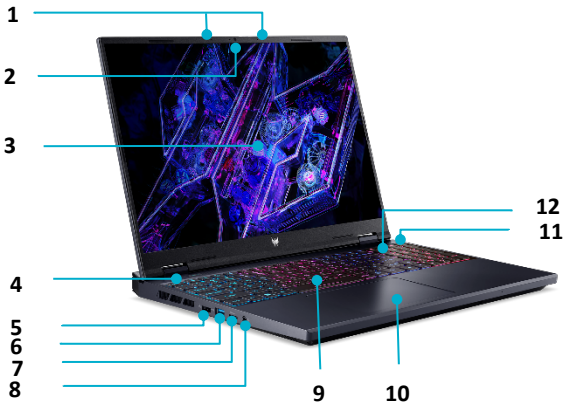
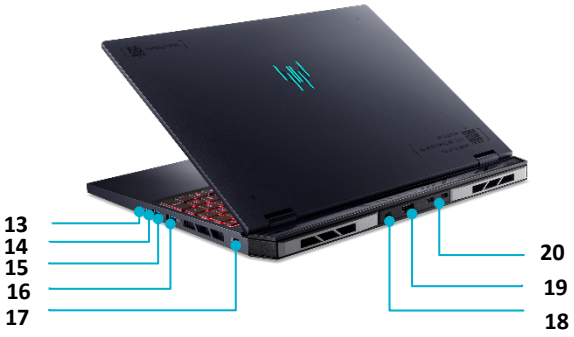
PREDATOR

PREDATOR HELIOS NEO 16

SPECIFICATIONS PREDATOR HELIOS NEO 16 PHN16-72





Product views

1. Microphones
2. Webcam
3. 16.0" display
4. Mode key
5. Ethernet (RJ-45) port
6. USB 3.2 Gen 1 port
7. MicroSD card reader
8. Headset/speaker jack
9. Keyboard
10. Touchpad
11. Power button
12. PredatorSense key
13. Battery indicator
14. Power indicator
15. USB 3.2 Gen 2 port
16. USB 3.2 Gen 2 port with power-off charging
17. Kensington lock slot
18. Power connector (DC-in)
19. HDMI® 2.1 port
20. Two USB Type-C™ ports (Thunderbolt™ 4)

Operating system[1]

Windows 11 Home

CPU and chipset[1]

Intel® Core™ i9-14900HX processor

Mobile Intel® HM770 PCH Chipset

Memory[1, 2, 3]

Dual-channel DDR5 SDRAM support

- 16GB, Up to 32 GB of DDR5 system memory

Memory Frequency: Up to 5600 MT/s

Display[4]

16.0" display with IPS (In-Plane Switching) technology, WUXGA 1920 x 1200, high-brightness (400 nits) Acer ComfyView™ LED-backlit TFT LCD, supporting 165 Hz, Grey to Grey 3 ms by Overdrive, Nvidia Advanced Optimus capable.

- 16:10 aspect ratio, sRGB 100%
- Wide viewing angle up to 170 degrees
- Ultra-slim design
- Mercury free, environment friendly

Graphics[1]

- **NVIDIA® GeForce RTX™ 4060** with 8 GB of dedicated GDDR6 VRAM

Audio

- DTS® X:Ultra Audio, featuring optimized Bass, Loudness, Speaker Protection with up to 6 custom content modes via smart amplifier
- Supported in Windows Spatial Sound for PC Gaming with DTS Sound Unbound license integrated
- Immersive audio rendering over headphones and internal speakers
- High SNR DAC with 2.1 Vrms out capability and can driver high impedance headphone (up to 600 ohm)
- Acer Purified.Voice technology with AI noise reduction in dual built-in microphones. Features include far-field pickup, dynamic noise reduction through neural network, adaptive beam forming, and pre-defined personal and conference call modes.
- Support Advanced Privacy Mode with 3rd Mic Integrated
- Compatible with Cortana with Voice
- Acer TrueHarmony Technology for lower distortion, wider frequency range, headphone-like audio and powerful sound

Storage[1, 5]

Solid state drive:

- 1 TB, PCIe Gen4, 16 Gb/s, NVMe
- 1 TB / 2 TB, NVMe, RAID 0 SSD

Webcam[1]

UFC with

- Narrow USB HD camera with blue glass
- Compatible with Windows
- 1920 x 1080 resolution
- 1080p HD video at 60 fps with Temporal Noise Reduction
- Dual Mic (33 mm + 33 mm)
- 86 x 3.2 x 2.55 mm

Wireless and networking[1]

WLAN

- Killer Wireless Wi-Fi 6E 1675i
- 802.11 a/b/g/n/ac/ax wireless LAN
- Band: 2.4 GHz, 5 GHz and 6 GHz
- 2x2 MU-MIMO technology
- Support CNVi interface

LAN

- Killer™ Ethernet E3100G
- 2.5G Ethernet
- Killer Control Center
- Lag and Latency Reduction™ Technology
- Advanced Stream Detect™2.0
- Killer DoubleShot™ Pro enabled
- GameFast™ Technology

WPAN

- Supports Bluetooth® 5.3 or above
- Supports Bluetooth LE Audio (LC3).

Security

Firmware Trusted Platform Module (TPM) solution | BIOS user, superviso | Kensington lock slot

Dimensions and weight[6, 7]

Dimensions: 357.78 (W) x 278.63 (D) x 25.95/27.85 (H) mm (14.09 x 10.97 x 1.02/1.1 inches)

Weight:

- 2.8 kg (6.17 lbs.) with 4-cell battery pack

Power adapter and battery[8, 9]

Power adapter:

- 3-pin 230 W 5.5 PHY AC adapter

Battery: 90 Wh 4-cell Li-ion battery

Battery life: Up to 6 hours (based on video playback test results)

Input and control

Keyboard:

103(US)-/104(UK)-key, FineTip RGB-backlight keyboard with independent standard numeric keypad, international language support

Touchpad: Multi-gesture touchpad, supporting two-finger scroll; pinch; gestures to open Cortana, Action Center, multitasking; application commands

- Microsoft Precision Touchpad certification
- Moisture resistant

Control Keys

Mode Key

Windows Desktop Apps[10]

- Planet9 Stub (For Gaming)
- PredatorSense
- Acer QuickPanel
- Acer Product Registration

Warranty

One-year International Travelers Warranty (ITW)

1. Specifications vary depending on model.
2. Shared system memory may be allocated to support graphics, depending on system memory size and other factors. Actual system memory available to the operating system will be reduced by any memory used by the graphics solution and resources required by the operating environment.
3. Memory speed may vary, depending on the CPU, chipset or memory fitted.
4. All brands and product names mentioned herein include trademarks of their respective companies and are used solely to describe or identify the products.
5. 1 GB is 1 billion bytes. Actual formatted capacity is less and may vary depending on preloaded materials and operating environment. Acer Recovery Management uses a portion of the stated hard disk capacity as dedicated backup space.
6. Minor variations in system dimensions are possible due to the manufacturing process.
7. Weight may vary depending on product configuration, vendor components, manufacturing variability, and selected options.
8. Listed battery life is based on testing using video playback. The test clip loops and continues to run, without interruption or any other inputs, until the battery is drained. Stated battery life is for comparison purpose only. Actual battery life varies by model, configuration, applications, video chip format and features used. A battery's maximum capacity decreases with time and use. Battery life test configuration: 13th Gen Intel® Core™ i9, NVIDIA® GeForce RTX™ 4070, WQXGA, Dual SSD, 32GB of DDR5 memory. Battery life test condition: LCD brightness 150 nits, connected headphones, WLAN off, Bluetooth off and Better Battery Mode on.
9. Actual battery life may vary considerably by specifications, depending on product model, configuration, applications, power management settings, operating conditions, and features utilized. Performance variation also arises based on components in use, which includes but is not limited to the processor, RAM capacity, storage, display and resolution, etc.
10. Bundled software may vary depending on hardware configuration, OS and regional availability.

In a continuing effort to improve the quality of our products, information in this document is subject to change without notice. Images shown are only representations of some of the configurations available for this model. Availability may vary depending on region. As a phenomenon known to thin-film transistors (TFTs), liquid crystal displays (LCDs) commonly exhibit a small number of discoloration dots, as so-called "non-conforming pixels." This phenomenon is a limitation of TFT LCD technology, not a product defect, and as such is not covered by Acer's warranty.
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