Predator PHN18-71 Specifications (v5-0-4)

Category		Description	Footnotes
Operating system	1	Windows 11 Home	
CPU and chipset	1	Intel® Core™ **i9-14900HX** processor (36 MB Smart Cache, 2.2 GHz Performance-core with Intel® Thermal Velocity Boost up to 5.8 GHz, overclock capable), supporting hybrid core architecture with Performance-core and Efficient-core Intel® Core™ **i7-14700HX** processor (33 MB Smart Cache, 2.1 GHz Performance-core with Intel® Thermal Velocity Boost up to 5.5 GHz, overclock capable), supporting hybrid core architecture with Performance-core and Efficient-core Intel® Core™ **i7-14650HX** processor (30 MB Smart Cache, 2.2 GHz Performance-core with Intel® Thermal Velocity Boost up to 5.2 GHz, overclock capable), supporting hybrid core architecture with Performance-core and Efficient-core Intel® Core™ **i5-14500HX** processor (24 MB Smart Cache, 2.6 GHz Performance-core with Intel® Turbo Boost Technology 2.0 up to 4.9 GHz, overclock capable), supporting hybrid core architecture with Performance-core and Efficient-core Intel® Core™ **i5-14450HX** processor (20 MB Smart Cache, 2.4 GHz Performance-core with Intel® Turbo Boost Technology 2.0 up to 4.8 GHz, overclock capable), supporting hybrid core architecture with Performance-core and Efficient-core Mobile Intel® HM770 PCH Chipset	
Memory	1, 2, 3	Dual-channel DDR5 SDRAM support • Up to 32 GB of DDR5 system memory Memory Frequency : Up to 5600 MT/s	
Display		18.0" display with IPS (In-Plane Switching) technology, WQXGA 2560 x 1600, high-brightness (500 nits) Acer ComfyView™ LED-backlit TFT LCD, supporting 240 Hz, Grey to Grey 3 ms by Overdrive, Nvidia Advanced Optimus capable. 16:10 aspect ratio, DCI-P3 100% Wide viewing angle up to 170 degrees Ultra-slim design Mercury free, environment friendly	4
		18.0" display with IPS (In-Plane Switching) technology, WQXGA 2560 x 1600, high-brightness (300 nits) Acer ComfyView™ LED-backlit TFT LCD,	4

Predator PHN18-71 Specifications (v5-0-4)		
	supporting 165 Hz, Grey to Grey 3 ms by Overdrive, Nvidia Advanced Optimus capable. 16:10 aspect ratio, DCI-P3 100% Wide viewing angle up to 170 degrees Ultra-slim design Mercury free, environment friendly 18.0" display with IPS (In-Plane Switching) technology, WUXGA 1920 x 1200, high-brightness (300 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	4
Graphics 1	**NVIDIA® GeForce RTX™ 4070** with 8 GB of dedicated GDDR6 VRAM, supporting 4608 NVIDIA® CUDA® Cores. - With 5th gen MAXQ technology design 1230 - 2175 MHz Boost Clock - Third Gen Ray Tracing Cores - Fouth Gen Tensor Cores - Ada Lovelace NVIDIA Architecture - Microsoft DirectX® 12 Ultimate. - NVIDIA DLSS 3.0 - NVIDIA Reflex - NVIDIA Broadcast - PCI Express Gen 4 - NVIDIA Resizable BAR - NVIDIA GeForce Experience™ - NVIDIA Ansel - NVIDIA FreeStyle - NVIDIA ShadowPlay® - NVIDIA Highlights - NVIDIA G-SYNC® - NVIDIA Game Ready Drivers - NVIDIA Studio Drivers. - NVIDIA Omniverse - NVIDIA GPU Boost™ - Vulkan RT API, OpenGL 4.6 - HDMI - DisplayPort - NVIDIA Dynamic Boost 2.0 - NVIDIA Whisper Mode 2.0 - NVIDIA Advanced Optimus - NVIDIA Battery Boost	

Predator PHN18-71 Specifications (v5-0-4)		
	• NVIDIA Rapid Core Scaling • NVIDIA CPU Optimizer	
	NVIDIA® **GeForce RTX**™ **4060** with 8 GB of dedicated GDDR6 VRAM, supporting 3072 NVIDIA® CUDA® Cores. • With 5th gen MAXQ technology design • 1470 - 2370 MHz Boost Clock • Third Gen Ray Tracing Cores • Fouth Gen Tensor Cores • Ada Lovelace NVIDIA Architecture • Microsoft DirectX® 12 Ultimate. • NVIDIA DLSS 3.0 • NVIDIA Reflex • NVIDIA Broadcast • PCI Express Gen 4 • NVIDIA Resizable BAR • NVIDIA GeForce Experience™ • NVIDIA Ansel • NVIDIA FreeStyle • NVIDIA ShadowPlay® • NVIDIA Highlights • NVIDIA G-SYNC® • NVIDIA Game Ready Drivers • NVIDIA Studio Drivers. • NVIDIA Omniverse • NVIDIA GPU Boost™ • Vulkan RT API, OpenGL 4.6 • HDMI • DisplayPort • NVIDIA Dynamic Boost 2.0 • NVIDIA Whisper Mode 2.0 • NVIDIA Advanced Optimus • NVIDIA Battery Boost • NVIDIA Rapid Core Scaling • NVIDIA CPU Optimizer	
	NVIDIA® **GeForce RTX**™ **4050** with 6 GB of dedicated GDDR6 VRAM, supporting 2560 NVIDIA® CUDA® Cores. • With 5th gen MAXQ technology design • 1605 - 2370 MHz Boost Clock • Third Gen Ray Tracing Cores • Fouth Gen Tensor Cores • Ada Lovelace NVIDIA Architecture • Microsoft DirectX® 12 Ultimate. • NVIDIA DLSS 3.0 • NVIDIA Reflex	

Predator PHN18-71 Specifications (v5-0-4)		
	• NVIDIA Broadcast • PCI Express Gen 4 • NVIDIA Resizable BAR • NVIDIA GeForce Experience™ • NVIDIA Ansel • NVIDIA FreeStyle • NVIDIA ShadowPlay® • NVIDIA Highlights • NVIDIA G-SYNC® • NVIDIA Game Ready Drivers • NVIDIA Studio Drivers. • NVIDIA Omniverse • NVIDIA GPU Boost™ • Vulkan RT API, OpenGL 4.6 • HDMI • DisplayPort • NVIDIA Dynamic Boost 2.0 • NVIDIA Whisper Mode 2.0 • NVIDIA Advanced Optimus • NVIDIA Battery Boost • NVIDIA Rapid Core Scaling • NVIDIA CPU Optimizer	
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	**Solid state drive** • 512 GB / 1 TB, PCIe Gen4, 16 Gb/s, NVMe • 1 TB / 2 TB, NVMe, RAID 0 SSD	1, 5
Webcam [1]	**Video conferencing** UFC with • Narrow USB FHD camera with blue glass • Compatible with Windows	

Predator PHN18-71 Specifications (v5-0-4)			
		• 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 UFC with • Narrow USB HD camera • Compatible with Windows • 1280 x 720 resolution • 720p HD video at 30 fps with Temporal Noise Reduction • Blue Glass lens • Dual Mic (33 mm + 33 mm) • 86 x 3.2 x 2.6 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).	
Privacy control	1	BIOS user, supervisor	
Dimensions and weight	6, 7	**Dimensions** • 404 (W) x 312.08 (D) x 27.15/29.15 (H) mm (15.91 x 12.29 x 1.07/1.15 inches) with Metal A Cover **Weight** • 3.4 kg (7.5 lbs.) with 4-cell battery pack, WQXGA display	
Power adapter and battery	8	**Power adapter** 3-pin 330 W 5.5 PHY AC adapter • 185.0 (W) x 85.0 (D) x 36.0 (H) mm (7.28 x 3.35 x 1.42 inches) • 1050 g (2.31 lbs.) with 180 cm DC cable • 180.0 (W) x 82.0 (D) x 38.5 (H) mm (7.09 x 3.23 x 1.52 inches) • 1233 g (2.70 lbs.) with 180 cm DC cable 3-pin 230 W 5.5 PHY AC adapter • 155 (W) x 75 (D) x 30 (H) mm (6.10 x 2.95 x 1.18 inches) • 700 g (1.52 lbs) with 180 cm DC cables	

Predator PHN18-71 Specifications (v5-0-4)		
	Battery • 90 Wh 4-cell Li-ion battery • For models with WQXGA Panel Battery life: Up to 6 hours (based on video playback test results)	9
Input and control	**Keyboard** 103(US)-/104(UK)-key, FineTip RGB-backlight keyboard with independent standard numeric keypad, international language support • Key-to-key area : 356.35mm (width) * 108.15mm (length) • Keybaord travel distance 2.0mm for gamer optimal typing feel **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** Predator Sense Key Copilot Key	
Input and output	**USB Type-C** USB Type-C™ port supporting: • USB 3.2 Gen 2 (up to 10 Gbps) • DisplayPort over USB-C • Thunderbolt™ 4 • USB charging 5 V; 3 A • DC-in port 20 V; 65 W USB Type-C™ port, supporting: • USB 3.2 Gen 2 (up to 10 Gbps) • DisplayPort over USB-C • Thunderbolt™ 4 • USB charging 5 V; 3 A • DC-in port 20 V; 65 W **USB Standard A** Three USB Standard-A ports, supporting: • One port for USB 3.2 Gen 1 • One port for USB 3.2 Gen 2 • One port for USB 3.2 Gen 2 featuring power off USB charging HDMI® 2.1 port with HDCP support Ethernet (RJ-45) port microSD card (SDXC compatible) DC-in jack for AC adapter 3.5 mm headphone/speaker jack, supporting headsets with built-in microphone (Notes: USB Type-C (DC-in port 20V; 65W): 1. TypeC 65W charging can achieve minimum usage.	

Predator PHN18-71 Specifications (v5-0-4)

	2. Charging slowly is an expected behavior. 3. Not claim Performance and Gaming Experience. 4. Not claim extend Dock and 2k/4K Monitor. 2x Thunderbolt port (USB3.2 / DP / PD / Thunderbolt / G-sync) are supported G-sync output.)	
Windows Desktop Apps [10]	**Games** • Planet9 Stub (For Gaming) **In-House** • Acer Product Registration • Acer QuickPanel • PredatorSense V5 (NB)	
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: 14th 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.
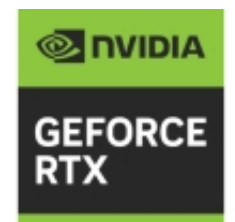
Predator PHN18-71 Specifications (v5-0-4)

About Acer

Founded in 1976, Acer is one of the world's top ICT companies with a presence in more than 160 countries. As Acer evolves with the industry and changing lifestyles, it is focused on enabling a world where hardware, software and services will fuse with one another, creating ecosystems and opening up new possibilities for consumers and businesses alike. Acer's 7,500 employees are dedicated to the research, design, marketing, sale, and support of products and solutions that break barriers between people and technology. Please visit www.acer.com for more information.

Appendix

v2-0-1 (Ver. 2)

Input and control

v3-0-2 (Ver. 3)

Input and output (Notes Changed)

Power adapter and battery and Battery's footnote

v4-0-3 (Ver. 4)

CPU and chipset

About

v5-0-4 (Ver. 5)

Input and control

Power adapter and battery and Battery's footnote