Buyers Guide

Acer Nitro 5

AN515-58-56CH

intel CORE i5

NVIDIA GEFORCE RTX

Windows 11

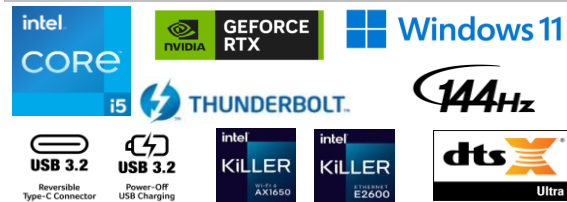| Model	Acer® Nitro 5 AN515-58-56CH Gaming Laptop

High Level Specifications

- Intel® Core™ i5-12500H Processor - up to 4.5GHz, 12 cores, 16 threads, 18MB Intel Smart Cache
- NVIDIA® GeForce RTX™ 4050 Laptop GPU with 6GB of dedicated GDDR6 VRAM, NVIDIA® DLSS, NVIDIA® Resizable BAR, NVIDIA® Dynamic Boost 2.0, NVIDIA® GPU Boost™, MUX Switch
- 15.6" Full HD (1920 x 1080) widescreen LED-backlit IPS display with 144Hz Refresh Rate, 16:9 aspect ratio
- 16GB DDR5 Memory and 512GB PCIe Gen 4 SSD (1 - PCIe M.2 Slot Available)
- DTS: X® Ultra Audio
- Acer TrueHarmony Technology
- Two Built-in Stereo Speakers
- 1 - USB Type-C Port USB 3.2 Gen 2 (up to 10 Gbps) DisplayPort over USB Type-C, Thunderbolt™ 4 & USB Charging
- 1 - USB 3.2 Gen 2 Port (Featuring Power-off Charging)
- 1 - USB 3.2 Gen 2 port and 1 - USB 3.2 Gen 1 port
- 1 - HDMI™ 2.1 Port with HDCP support
- Killer™ Wi-Fi 6 1650 featuring 2x2 MU-MIMO technology (Dual-Band 2.4GHz and 5GHz)
- Killer™ Ethernet E2600 10/100/1000 Gigabit Ethernet LAN
- Bluetooth® 5.1
- 4-Zone RGB Backlit Keyboard
- Lithium-ion 57.5 Watt Hour Battery
- Windows 11 Home

What's in the Box

- Laptop
- AC Adapter & Power Cord
- Hard Drive Upgrade Kit

Key Features

Web Description

Acer Nitro 5 AN515-58-56CH 15.6" Full HD IPS 144Hz Display, 12th Gen Intel Core i5-12500H, NVIDIA GeForce RTX 4050 Laptop GPU, 16GB DDR5, 512GB PCIe Gen 4 SSD, Killer WiFi 6, Killer Ethernet E2600, Thunderbolt 4, 4-Zone RGB Backlit Keyboard, Windows 11 Home

The Next Evolution

Fire it up then go full throttle faster and more effectively than ever with Acer's next evolution of its Nitro 5 gaming laptop. The new Nitro 5 soars to new levels of performance for gamers and creators, courtesy of its 12th Gen Intel® Core™ processor and NVIDIA® GeForce RTX 4050 laptop graphics—powered by Ada Lovelace NVIDIA's RTX architecture! Next, toss in the vivid, crystal-clear 15.6" Full HD display with a 144Hz IPS panel, ample cooling and a 4-zone RGB keyboard and you can see why the Nitro 5 is a knockout hit for gamers of every level!

Features

Dominating Specs
Reign over the game world with the combined power of a 12th Gen Intel® Core™ i5 processor and NVIDIA® GeForce RTX™ 4050 GPU (powered by the ultra-efficient NVIDIA Ada Lovelace architecture). Configure your laptop for top speed and massive storage with two slots for Gen 4 M.2 PCIe, one 2.5" HDD bay and up to 32GB of DDR5 memory.

Picture-Perfect. Furiously Fast.
With the sharp visuals of a 15.6" Full HD IPS display with a lightning-quick 144Hz refresh rate, your game sessions will be fluid, unbroken, and unmatched. Now you can land those reflexive shots with pinpoint accuracy and minimal ghosting. With the included MUX switch, you can disable the integrated graphics for an increase in gaming performance.

Chilled to Perfection
The newly refined chassis comes with a few extra tricks up its sleeve in the form of dual-fan cooling, dual-intakes (top and bottom), and a quad-exhaust port design. Pop open the NitroSense utility app for extra control and take command over fan speeds, lighting, and more.

The Key to Victory
Spice things up with the 4-zone RGB keyboard and take command of the inner workings of the laptop via the dedicated NitroSense Kay. The WASD and arrow keys are also highlighted for easy visibility for those clutch moments.

Breaking the Sound Barrier
Better audio delivers a competitive edge as well as a more immersive experience through dual 2W speakers. With DTS:X® Ultra, sounds are clear and can be provided in a 3D spatial soundscape, allowing you to hear where your opponents are coming from with pinpoint precision.

Killer Connectivity
Get an edge on line by taking control of your network and prioritizing your gameplay with Killer™ Ethernet E2600 and Killer™ Wi-Fi 6 AX1650. Plug all your peripherals into the full range of ports, including HDMI 2.1 and the newest USB 3.2 standard with Gen1 and 2 support.

Processor

12th Generation Intel® Core™ i5-12500H 12-Core Processor 2.5GHz with Performance-core Max Turbo Frequency[1] up to 4.5GHz, Supporting hybrid core architecture with Performance-core and Efficient-core (18MB Smart Cache)

Display

15.6" Full HD (1920 x 1080) widescreen LED-backlit IPS display with 144Hz Refresh Rate, 16:9 aspect ratio

Memory

16GB DDR5 Memory[2]
Used Slots: 2 x 8GB | 0 Slots (Available)
2 DDR5 Slots (Total) - Maximum 32GB

Video

NVIDIA® GeForce RTX™ 4050 Laptop GPU with 6GB of dedicated GDDR6 VRAM, supporting NVIDIA® GeForce® Experience, 2nd Gen Ray Tracing Cores, 3rd Gen Tensor Cores, NVIDIA® DLSS, NVIDIA® WhisperMode 2.0, NVIDIA® Resizable BAR, NVIDIA® Dynamic Boost 2.0, NVIDIA® GPU Boost™, Microsoft® DirectX® 12 Ultimate, OpenGL® 4.6, Game Ready Drivers, HDCP 2.3, MUX Switch

Audio

DTS: X® Ultra Audio
Acer TrueHarmony Technology
Two Built-in Stereo Speakers

Acer Purified.Voice™ Technology with AI Noise Reduction & Two Built-in Microphones

Storage

512GB PCIe Gen 4 SSD (2 x PCIe M.2 Slots | 1 Slot Available)
1 x 2.5" Hard Drive Bay (Available)

Optical Drive

N/A

Digital Media Reader

N/A

Communications

Killer™ Double Shot Pro

Killer™ Wi-Fi 6 1650 featuring 2x2 MU-MIMO technology (Dual-Band 2.4GHz and 5GHz)
Killer™ Ethernet E2600 10/100/1000 Gigabit Ethernet LAN
Bluetooth® 5.1

Interfaces

1 - USB Type-C Port USB 3.2 Gen 2 (up to 10 Gbps) DisplayPort over USB Type-C, Thunderbolt™ 4 & USB Charging
1 - USB 3.2 Gen 2 Port (Featuring Power-off Charging)
1 - USB 3.2 Gen 2 port and 1 - USB 3.2 Gen 1 port
1 - HDMI™ 2.1 Port with HDCP support
1 - Headphone/Speaker/Line-Out Jack
1 - Ethernet (RJ-45) Port
1 - DC-in Jack for AC Adapter
1 - Kensington Lock Slot

Webcam

HD Webcam (1280 x 720) with Blue Glass Lens supporting 720 HD Video

Acer's TNR (Temporal Noise Reduction) technology for high-quality imagery in low-light conditions

Convenience Features

Precision Touchpad (supporting Windows Modern Touchpad gestures)
Dedicated Numeric Keypad
Media Control Keys

Battery Type

Lithium-ion 57.5 Watt Hour Battery

Dimensions (System)

14.19 (W) x 10.67 (D) x 1.06 (H) inches
360.4 (W) x 271.09 (D) x 26.9 (H) mm

Dimensions (Box)

21.38 (L) x 3.15 (W) x 13.43 (H) inches
543 (L) x 80 (W) x 341 (H) mm

Weights

5.51 lbs. | 2.5 kg (system unit only)
Approximately 8.93 lbs.| 4.05 kg (box)

Pallet Quantity

75 units per pallet

Limited Warranty

One-year International Travelers Limited Warranty (ITW)[5]

Model	Color	Part Number	UPC
AN515-58-56CH	Obsidian Black	NH.QLZAA.001	195133161367

Software

Windows 11 Home
Productivity
Acer Care Center
Microsoft® Office Trial[7]
Cyberlink® PhotoDirector 8
Cyberlink® PowerDirector 14
Multimedia
Netflix
Tools
NitroSense