

Neu-X1045-N150

Edge Computing System
Powered by Intel® Processor N150



Main Features

- Intel® processor N150
- Slim compact chassis and fanless design
- 1 x DDR5 4800 SO-DIMM, up to 16GB
- Support 2 x HDMI® 1.4 output 4K@30Hz
- TPM 2.0 design for security
- Rich I/O connectivity: 2 x 2.5GbE LAN, 4 x USB 3.2 Gen 1
- 1 x M.2 Key M 2242 for supporting PCIe & SATA storage device
- 1 x Mini PCIe slot supports a Wi-Fi/LTE module
- Support DC 12V power input

Product Overview

Introducing the Neu-X1045-N150, powered by the Intel® processor N150. It offers enhanced computing performance, power efficiency, and a comprehensive set of IoT features. The Neu-X1045-N150 supports dual HDMI® 1.4 display outputs, dual 2.5GbE LAN ports, four USB 3.2 Gen 1 ports, an RS-232/422/485 port, and an M.2 Key M 2242 storage slot that accommodates both PCIe and SATA. Additionally, the Mini PCIe slot supports LTE and Wi-Fi 6/6E/7 modules, enabling wide-area coverage and real-time data transmission for gateway applications.

With its slim, compact, fanless design and enhanced durability, the Neu-X1045-N150 is well-suited for various applications, including IoT gateways, self-service kiosks, endless aisles, QSRs, digital signage, smart poles, intelligent lighting systems, and PIDS (passenger information display system) to make our cities smarter.

Specifications

Processor

- Intel® processor N150, PBP 6W

Integrated Graphics

- Intel® UHD Graphics, up to 32EU w/ INT8 extension

Main Memory

- 1 x DDR5 4800 SO-DIMM, non-ECC, unbuffered, up to 16GB

I/O Interface Front

- 2 x Antenna hole
- 1 x Remote power switch jack
- 1 x COM port (DB9), supports RS-232/422/485
- 1 x Storage active LED

I/O Interface Rear

- 2 x 2.5GbE RJ45 port with LEDs
- 2 x HDMI® 1.4, up to 3840x2160@30Hz
- 4 x USB 3.2 Gen 1, Type-A
- 1 x Power button with LED
- 1 x DC-in jack with lock

I/O Interface Internal

- 1 x 9-pin header for RS-232, supports RI/5V/12V
- 1 x 4-pin header, supports speaker out amplifier 2W/4Ω
- 1 x 9-pin header, supports mic in and line out
- 2 x 6-pin header for three USB 2.0 ports
- 1 x 10-pin header for GPIO, 4 x GPI, 4 x GPO

Expansion Slot

- 1 x Full-size Mini PCIe slot
 - Support a Wi-Fi 6/6E/7 or LTE module
- 1 x nano-SIM slot

Storage

- 1 x M.2 Key M 2242 SSD (PCIe 3.0 x1, SATA 3.0)

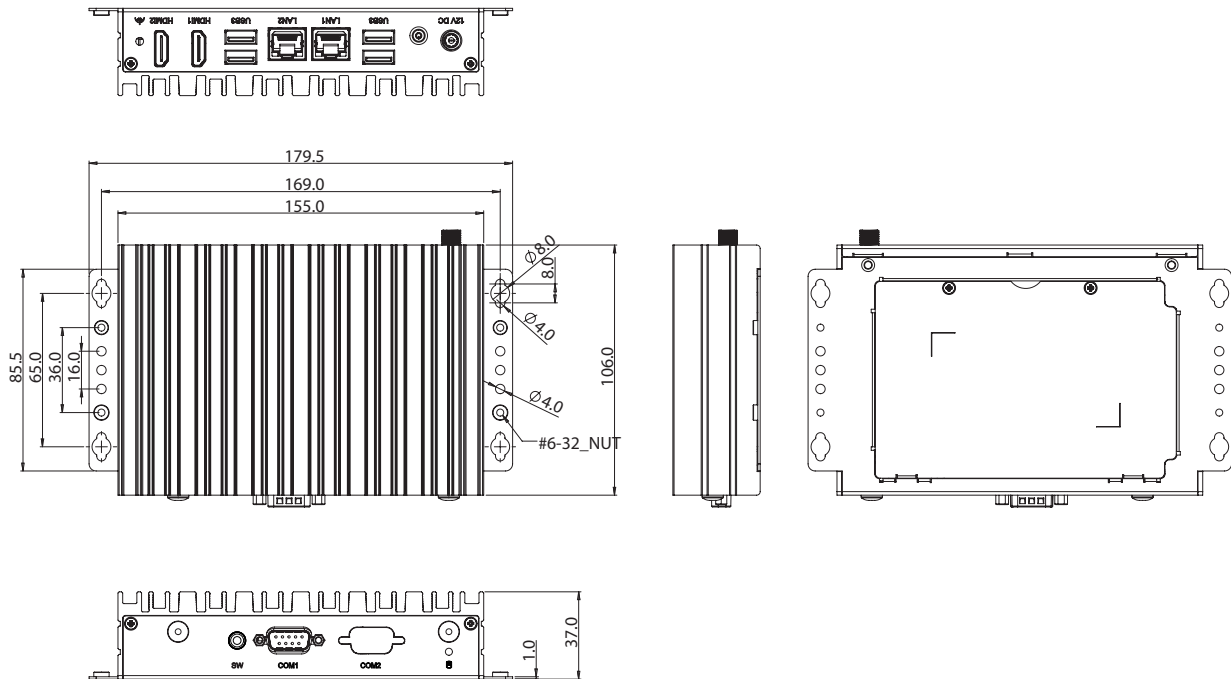
Power Supply

- Nominal voltage: +12V DC
- AC/DC +12V, 60W power adapter in carton

Environment

- Temperature:
 - Ambient temperature with 0.7m/s air flow: -5°C~50°C
 - Storage temperature: -20°C~80°C
- Humidity: 95% (non-condensing)

Dimension Drawing



- Shock protection: 50G peak acceleration, 11ms according to IEC 60068-2-27
- Vibration protection
 - Random: 2Grms@5Hz~500Hz, IEC 60068-2-64
 - Sinusoidal: 2G@5Hz~500Hz, IEC 60068-2-6

Mechanical

- Dimensions: 179.5mm (W) x 106mm (D) x 37mm (H)
- Weight: 0.85kg

Package Information

- Dimensions: 288mm (W) x 242mm (D) x 185mm (H)
- Gross weight: 3.0kg (2 units per carton)

Certifications

- CE (EN 55035 + EN 55032)
- FCC Class A (EMI Part 15B)
- LVD (EN 62368-1)
- UL/CUL (62368-1)

Operating System

- Windows 11
- Windows 10, 64-bit
- Linux

Ordering Information

- **Neu-X1045-N150 (P/N: 10W10X10406X0)**
Intel® processor N150, 6W slim and fanless system