

Neu-X104-N150/N250

Edge Computing System
Powered by Intel® Processor N-series



Main Features

- Intel® Processor N150/N250
- Slim compact chassis and fanless design
- 1 x DDR4 3200 SO-DIMM, up to 16GB
- Support 2 x HDMI® 2.0 output 4K@60Hz
- TPM 2.0 onboard design for security
- Richful I/O connectivity: 2 x 2.5GbE LAN, 4 x USB 3.2 Gen2
- 1 x M.2 2242 Key M for supporting PCIe & SATA storage device
- 1 x Mini PCIe slot supports Wi-Fi and LTE module
- Support power input 12 VDC

Product Overview

Introducing the Neu-X104-N150/N250, powered by Intel® Processor N150/N250, offering enhanced computing performance with power efficiency, and a comprehensive set of IoT features. It supports dual HDMI® 2.0 display outputs, dual 2.5GbE LAN ports, four USB 3.2 Gen 2 ports, one RS-232/RS422/RS485 port, and an M.2 Key M 2242 storage slot that accommodates both PCIe and SATA. Additionally, the mPCIe 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-X104-N150/N250 are 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

CPU Support

- Intel® processor N150, 6W
- Intel® processor N250, 6W

Graphic & Display

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

Main Memory

- 1 x DDR4 3200 SO-DIMM, non-ECC, unbuffered, up to 16GB

I/O Interface-Front

- 2 x 2.5GbE RJ45 port with LEDs
- 2 x HDMI® 2.0b, up to 3840 x 2160@60Hz
- 4 x USB 3.2, 10 Gbps, Type-A
- 1 x Power button with LED
- 1 x DC in Jack with lock

I/O Interface-Rear

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

Internal I/O

- 1 x 9-pin header for RS-232, supports RI/5V/12V
- 1 x 4-pin header supporting speaker out Amplifier 2W/4Ω
- 1 x 9-pin header supporting Mic in and Line out
- 2 x 6-pin header for 3 x USB 2.0 port
- 1 x 10-pin header for GPIO, 4 x GPI, 4 x GPO

Expansion

- 1 x Mini PCIe full-size connector
 - Support Wi-Fi 6/6E/7 & LTE module
- 1 x nano SIM slot

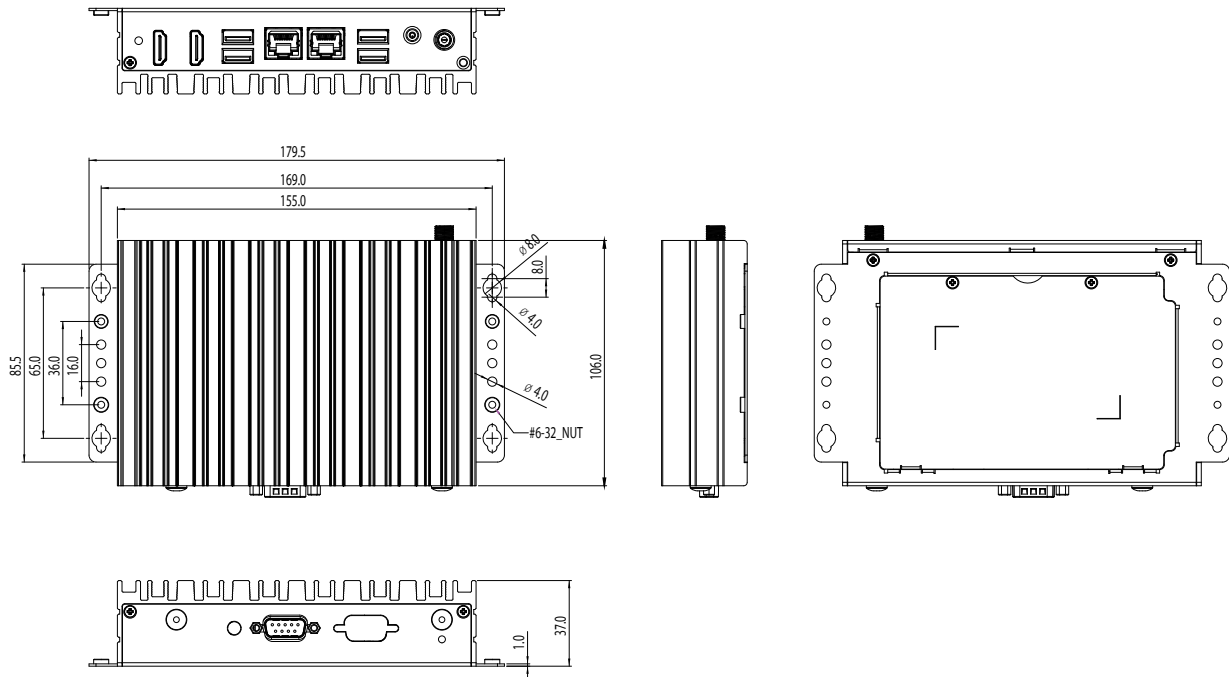
Storage

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

Power Supply

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

Dimension Drawing



Environment

- Operating temperature: -5°C~50°C ambient with 0.7m/s air flow
- Humidity: 95% (non-condensing)
- Storage temperature: -20°C~80°C
- Shock protection: 50G peak acceleration, 11ms according to IEC 60068-2-27
- Vibration protection
 - Random: 2Grms@5~500Hz, IEC 60068-2-64
 - Sinusoidal: 2G@5~500Hz, IEC 60068-2-6

Mechanical & Dimension

- System Unit
 - Dimension: 179.5mm (W) x 106mm (D) x 37mm (H) (w/bracket)
 - Net weight: 0.85Kg/unit
- Package carton
 - Dimension: 288mm (W) x 242mm (D) x 185mm (H)
 - Gross weight: 3.2kg (2 units/per carton)

Certification

- CE (EN 55035 + EN 55032)
- FCC Class A (EMI part 15B)
- LVD (EN 62368-1)

Operating System

- Win 11
- Win 10 64-bit
- Linux

Ordering Information

- ♦ **Neu-X104-N150 (P/N: 10W10X10400X0)**
Intel® Processor N-series, N150, 6W slim and fanless system
- ♦ **Neu-X104-N250 (P/N: 10W10X10401X0)**
Intel® Processor N-series, N250, 6W slim and fanless system