



## Main Features

- Intel® processor N50
- Slim compact chassis and fanless design
- 1 x DDR4 SO-DIMM, up to 16GB
- Support 2 x HDMI® 2.0 output 4K@30Hz
- TPM 2.0 design for security
- Richful I/O connectivity: 2 x 2.5GbE LAN, 4 x USB 3.2 Gen 2
- 1 x M.2 Key M 2242 for supporting PCIe & SATA storage device
- 1 x Mini PCIe slot supports Wi-Fi and LTE modules
- Support DC 12V power input

## Product Overview

The Neu-X102-N50 is powered by the Intel® processor N50, featuring upgraded computing performance, low power consumption, and integrating a rich set of IoT features. It supports dual HDMI® 2.0 display outputs, dual 2.5GbE LAN ports, four USB 3.2 Gen 2 ports, an RS-232/422/485 port and an M.2 Key M 2242 storage slot that supports PCIe and SATA format. In addition, the Mini PCIe slot supports LTE and Wi-Fi 6/6E modules. With LTE and Wi-Fi communication, the Neu-X102-N50 provides wide-area coverage and real-time transmission for gateway applications.

With its slim, compact, fanless design and extended durability, it is well-suited for a wide range of applications, including IoT gateways, self-service kiosks, endless aisles, QSRs, drive-thru kiosks, bus stops, digital transit information signs, intelligent poles/lighting systems, and information display systems such as PIDS for smart cities.

## Specifications

### CPU Support

- Intel® processor N50, TDP 6W

### Graphics & Display

- Intel® UHD graphics

### Main Memory

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

### I/O Interface-Front

- 2 x Antenna hole
- 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® 2.0, up to 3840x2160@30Hz
- 4 x USB 3.2 Gen 2
- 1 x Power button with LED
- 1 x DC in jack with lock

### Internal I/O

- 1 x 9-pin header for COM (RS-232, RI/5V/12V)
- 1 x 9-pin header for audio 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

- 1 x Mini PCIe full-size connector with nano-SIM slot onboard, supports Wi-Fi 6/6E & LTE modules

### Storage

- 1 x M.2 Key M 2242 storage for supporting SATA & PCIe signal

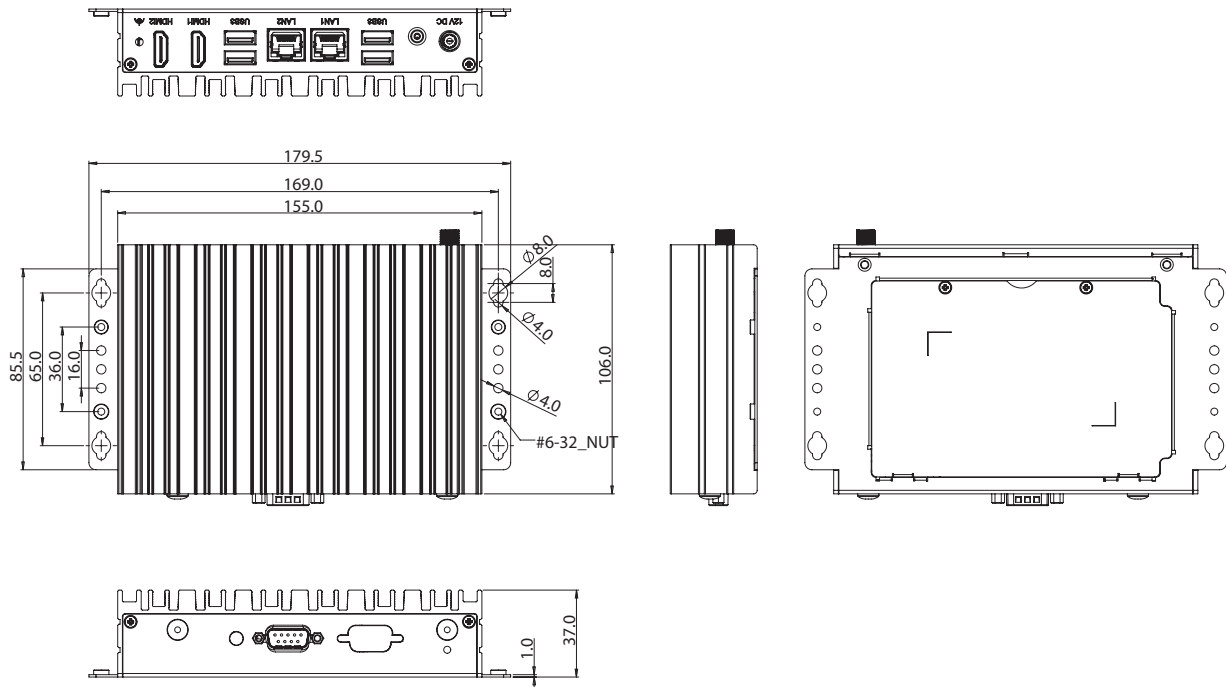
### Power Supply

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

### Environment

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

## 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 & Dimension

- System unit:
  - Dimensions: 179.5mm (W) x 106mm (D) x 37mm (H) (w/ bracket)
  - Net weight: 0.85kg
- Package carton:
  - Dimensions: 288mm (W) x 242mm (D) x 185mm (H)
  - Gross weight: 3.0kg (2 units per carton)

### Certification

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

### Operating System

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

## Ordering Information

- **Neu-X102-N50 (P/N: 10W10X10200X0)**  
Intel® processor N50, TDP 6W, slim and fanless system