NISE50 A04-02

Intel® Processor N series

N97 Fanless System





Main Features

- Onboard Intel Processor N97 quad-core 2.0GHz
- 1 x HDMI®
- 3 x 2.5GbE LAN, supports WoL, teaming, PXE, and EtherCAT
- Storage supports 2 x M.2 SATA SSD
- 1 x M.2 2230 Key A for Wi-Fi 4/5/6E module
- 1 x M.2 3042/3052 Key B for 4G/5G module
- 2 x USB 3.2
- 1 x DB9 for RS-232/422/485
- Support 12~24V DC input and AT/ATX power modes

Product Overview

NISE 50 A04-02 is a fanless PC powered by the latest generation Intel® N97 processor. It delivers power-efficient performance designed for next-generation industrial edge embedded systems that require high-resolution graphics and low power consumption - such as industrial automation, intelligent transportation, retail, and smart city IoT solutions.

NISE 50 A04-02 supports an operating temperature range of -20°C to 60°C, ensuring reliable performance in industrial environments. It features strong connectivity with 3 x 2.5GbE LAN ports and 1 x COM port, ideal for Modbus TCP and Modbus RTU communication. The system supports scalable networks and flexible storage configurations with 1 x M.2 slot for 5G/LTE, 1 x M.2 slot for Wi-Fi and Bluetooth, and 1 x M.2 slot for storage. It also supports 12V DC/24V DC power input and features onboard TPM 2.0 for enhanced security.

Specifications

Model
- Intel® Processor N97 (embedded)

Main Memory
- 1 x DDR5 4800 SO-DIMM, supports up to 16GB

Display Option
- 1 x HDMI®

LED indicator
- 1 x Battery low Status
- 2 x GPO

I/O Interface - Front
- ATX power on/off switch
- 1 x Intel® I226-IT 2.5GbE TSN LAN port, supports WoL, teaming, PXE, and EtherCAT
- 2 x Intel® I226-V 2.5GbE LAN port, supports WoL, teaming, PXE, and EtherCAT
- 2 x USB 3.2
- 1 x HDMI®
- 1 x DB9 for COM1, supports RS-232/422/485 with auto flow control, BIOS setting
- 1 x 3-pin DC input, supports +12/24V DC

I/O Interface - Internal
- 1 x nano-SIM holder
- TPM 2.0

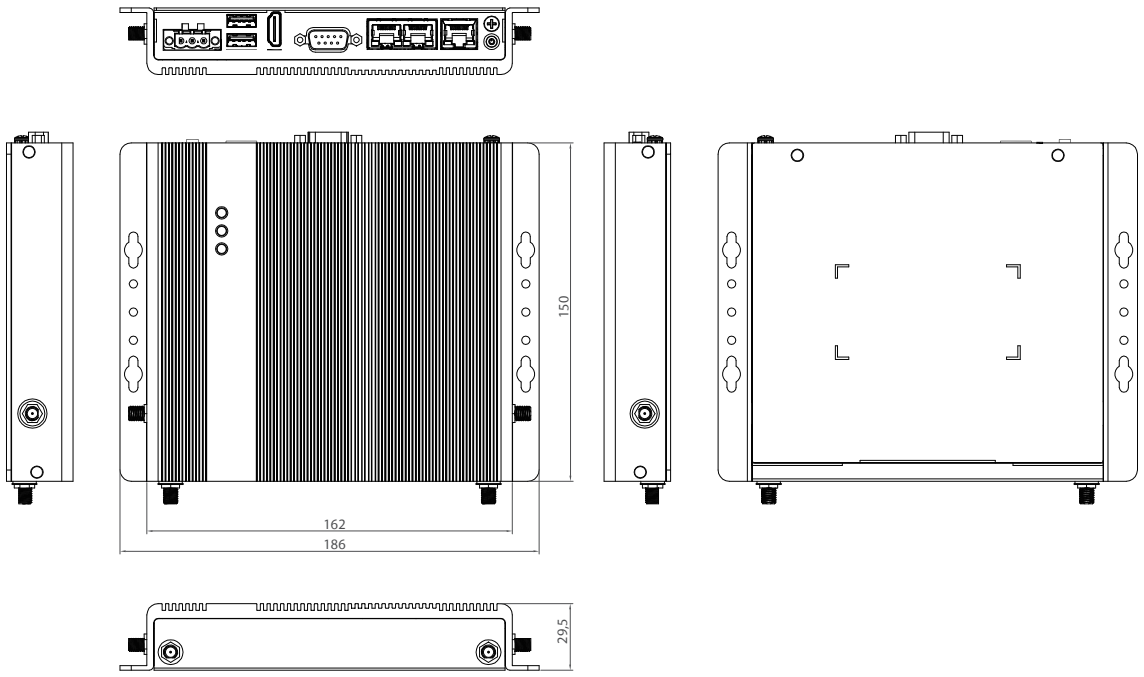
Expansion Slot
- 1 x M.2 2230 Key A, supports optional Wi-Fi 4/5/6E module
- 1 x M.2 2242/2280 Key B, supports optional SATA Storage module
- 1 x M.2 2242/3042/3052 Key B, supports optional 4G/5G/SATA storage module

Power Requirement
- Power input: +12/24V DC
- Optional 24V, 60W/120W power adapter

Construction
- Aluminum top cover and metal chassis with fanless design

Environment
- Operating temperature: Ambient with air flow(according to IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14): -20°C~60°C
- Storage temperature: -20°C~80°C
- Relative humidity: 95% at 40°C
- Shock protection:
  - M.2: 50G@wall mount, half sine, 11ms(operation) , IEC 60068 2-27

Dimension Drawing



- Vibration protection w/ M.2 & SSD condition:
  - Random: 2Grms@5~500 Hz, IEC 60068-2-64
  - Sinusoidal: 2Grms@5~500 Hz, IEC 60068-2-6

Dimensions
- 186mm (W) x 150mm (D) x 28mm (H)

Weight Information
- 0.9kg

Certifications
- CE
- FCC Class A

Support OS
- Windows 11
- Windows 10 IoT Enterprise, 64-bit
- Linux Kernel version 4.1

Ordering Information

- **NISE50 A04-02 (10J00005062X0)**
  Intel Processor N97 2.0GHz
- 24V, 60W AC to DC power adapter w/o power cord (P/N: 7400060054X00)
- 24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120029X00)