



Main Features

- Onboard Intel® 11th Core-i/ Celeron processor
- 4 x HDMI
- 3 x USB 3.0, 1 x USB 2.0
- 1 x RS232/422/485, 1 x RS232
- 3 x GbE LAN ports; support WoL, teaming and PXE
- Onboard TPM 2.0 chip
- 1 x M.2 socket for storage/4G LTE/5G modules
- 1 x mini-PCIe socket support optional mSATA/Wi-Fi/BT/4G LTE module
- Support operating temperature from -10°C to 60°C
- Support +12V to 24VDC input; support ATX power mode

Product Overview

Powered by the latest generation of Intel® Core™ and Celeron® processor (formerly codenamed "Tiger Lake-UP3"), NISE 70 is fanless PC designed for industrial applications which demand low power consumption and abundant I/O interfaces but with limited installation space.

NISE 70 supports a wide range of operating temperature from -10°C to 60°C and wide range DC power input from 12V to 24V. NISE 70 is also the first system in the slim NISE 50 series to support 4 independent displays and DDR4 3200MHz memory up to 32GB. The NISE 70 have strong connectivity - Ethernet-based LAN port and traditional serial port, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 1 x mini-PCIe socket and 1 x M.2 socket which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 4G LTE, 5G modules as well as storage module. NISE 70 is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support

- Onboard Intel® 11th Core-i/ Celeron processor
- Support Intel® Core™ i7/i5 Tiger Lake-UP3 processors with different SKUs

Main Memory

- 1 x DDR4 3200 SO-DIMM socket, support up to 32GB

Display Option

- 4 x HDMI ports, support 4K@30Hz

I/O Interface-Front

- ATX power on/off switch
- 4 x HDMI port, support 4K@30Hz
- 2 x Intel® I211 and 1 x Intel® WGI219LM GbE LAN ports; support WoL, teaming and PXE
- 1 x Antenna hole

I/O Interface-Rear

- 3 x USB 3.0 ports (900mA per each)
- 1 x USB 2.0 (500mA per each)
- 2 x DB9 for COM1 & COM2
 - COM1: RS232/422/485 auto flow control
 - COM2: full RS232 signal

- 1 x 2-pin remote power on/off switch
- 2 x Antenna hole
- Support +12V to 24V DC input

I/O Interface-Internal

- 4 x GPI and 4 x GPO (programmable to GPI or GPO)

Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/BT/4G LTE/mSATA
- 1 x M.2, support Key B & B+M module for optional 4G LTE/5G/SATA storage (SATA/PCIe/USB, 2242/3042)

Power Requirements

- Power input: +12 to +24V DC
- 1 x Optional 24V, 60W power adapter

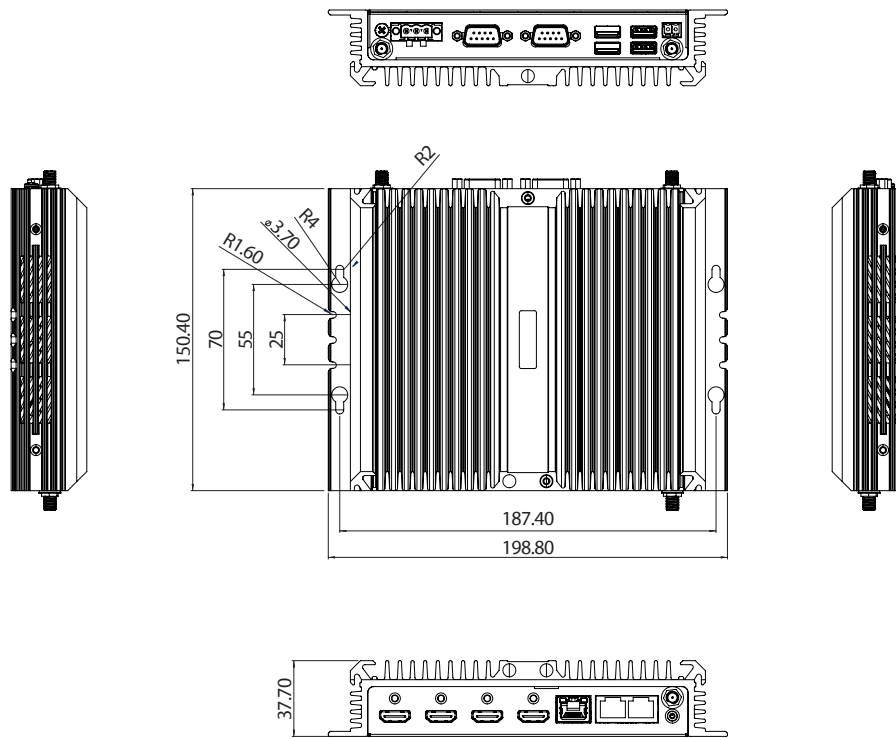
Support OS

- Windows® 10 Enterprise 64-bit
- Linux Kernel 4.19

Dimensions

- 198.8mm (W) x 150.4mm (D) x 37.7mm (H) with wall mount bracket

Dimension Drawing



Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature: Ambient with air flow: -10°C to 60°C (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
 - M.2/mSATA: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with mSATA & M.2 condition:
 - Random: 2Grms@5~500 Hz, IEC60068-2
 - 64-Sinusoidal: 2Grms@5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

Ordering Information

- ♦ **NISE 70-T01 (P/N: 10J00007000X0)**
Intel® Celeron® 6305E (Tiger Lake-UP3) processor fanless system
- ♦ **NISE 70-T02 (P/N: 10J00007001X0)**
Intel® Core™ i5 1145G7E (Tiger Lake-UP3) processor system with fan
- ♦ **NISE 70-T03 (P/N: 10J00007002X0)**
Intel® Core™ i7 1185G7E (Tiger Lake-UP3) processor system with fan
- ♦ **24V, 60W AC /DC power adapter w/o power cord (P/N: 7400060054X00)**
- ♦ **NISE 70-T04 (P/N: 10J00007003X0)**
Intel® Core™ i5 1145G7E (Tiger Lake-UP3) processor fanless system (15W TDP limited)
- ♦ **NISE 70-T03 (P/N: 10J00007002X0)**
Intel® Core™ i7 1185G7E (Tiger Lake-UP3) processor fanless system (15W TDP limited)