

## Main Features

- Onboard Intel® Celeron® processor J1900 quad core, 2.42GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 2.0, 1 x USB 3.0
- 4 x COM ports (COM1 & COM2 with RS232/422/485, jumper-free setting)
- 1 x Optional interface for optional Wi-Fi/3.5G
- Support -5 to 55 degrees Celsius operating temperature
- Support 9-30VDC input

## Product Overview

Powered by Intel® Celeron® processor (formerly codenamed "Bay Trail"), the NISE 105U provides outstanding performance not only on computing but also on graphics, and it presents a brand new opportunity for both intelligent and industrial computing solutions. Up to 8G DDR3L memory, NISE 105U have several options on storage devices like M.2, HDD and SSD. The NISE 105U support wide DC input range from 9-30VDC. The NISE 105U has high integration ability with optional mini-PCIe module and 4 x COM ports, which makes it a real intelligent system for various applications such as factory automation applications (with optional PROFIBUS®, PROFINET®, DeviceNET®, EtherCAT®, EtherNet/IP™ Master module), network applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 105U is definitely the top choice for M2M intelligent system and factory automation platforms.

## Specifications

### CPU Support

- Onboard Intel® Celeron® processor J1900 quad core, 2.42GHz

### Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

### Display Option

- Dual independent display
  - HDMI and DVI-I
  - HDMI and VGA (via DVI-I to VGA converter)

### I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programing LEDs
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI
- 1 x USB 3.0 (900mA per each)
- 2 x USB 2.0 (500mA per each)
- 1 x DB9 for COM1 support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 1 x 2-pin DC input, support +9 to 30VDC input

### I/O Interface - Rear

- 1 x Remote power on/off switch
- DVI-I display output
- 1x DB9 for COM2, support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 2 x DB9 for COM3 & COM4 support RS232 only
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G

### I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL type)

### Storage Device

- 1 x M.2 support B & B+M key module
- 1 x 2.5" HDD (SATA 2.0)

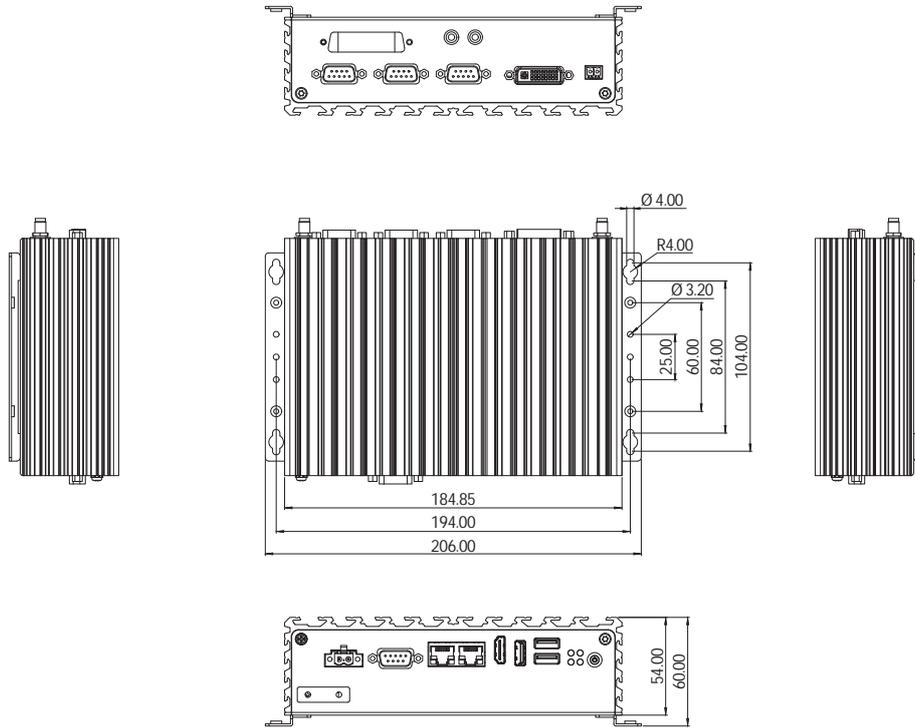
### Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/3.5G

### Power Requirement

- Power input: +9VDC to +30VDC
- 1 x Optional 24V, 60W power adapter

## Dimension Drawing



### Support OS

- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Windows Embedded Compact 7, 32-bit
- Windows 10 IoT Enterprise, 64-bit
- Linux Kernel version 3.8.0

### Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

### Construction

- Aluminum and metal chassis with fanless design

### Environment

- Operating temperature  
Ambient with air flow: -5°C to 55°C  
(according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27

- Vibration protection w/HDD condition

- Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
- Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6

- Vibration protection w/M.2 & SSD condition

- Random: 2Grms @ 5~500Hz, IEC60068-2-64
- Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

### Certifications

- CE
- FCC Class A

## Ordering Information

- **NISE105U (P/N: 10J00010522X0)**  
Intel® Celeron® Processor J1900 Quad Core fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060032X00)**