



## Main Features

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Dual independent display output
- 2 x Intel® I210-AT GbE LAN ports support WoL, teaming and PXE
- 3 x USB 2.0 & 1 x USB 3.0
- 2 x RS232/422/485 with 2.5KV isolation protection
- 2 x mini-PCIe socket for optional wireless modules
- Support -5~55 degree C operating temperature
- Typical 24V DC input

## Product Overview

Powered by the latest generation of Intel® Celeron® processor J1900 (formerly codenamed “Bay Trail-D”), NIFE 200S presents intelligent PC-based controller and IoT gateway for factory automation. NIFE 200S supports up to 8G DDR3L memory and support flash type of storage devices like SD (data storage use) and mSATA for better vibration resistance. The NIFE 200S support operating temperature from -5 up to 55°C with typical DC input 24V ±20% range. The NIFE 200S has high integration ability with optional mini-PCIe module and 2 x COM ports, which makes it a reliable connection with devices in factory automation applications, IoT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NIFE 200S is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

## Specifications

### CPU Support

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz

### Main Memory

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

### Display Option

- Dual independent display
  - DVI-I
  - DP

### I/O Interface-Front

- ATX power on/off switch
- LEDs for HDD LED, batty LEDs, power LED, COM port Tx/Rx, 5 x programmable GPO LEDs
- 2 x Intel® I210-AT GbE LAN ports, support WoL, teaming and PXE
- 1 x DP display output
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)

- 3 x USB 2.0 (500mA per each)
- 2 x RS232/422/485 support auto flow control
  - Jumper-free setting on RS232/422/485
  - Support 2.5KV isolation protection on COM1
- 1 x 3-pin DC input, typical 24V DC input with ±20% range

### Storage Device

- 1 x internal SD card (data storage only)
- 1 x miniPCIe for mSATA use

### Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/mSATA modules
- 1 x SIM card holder for wireless use

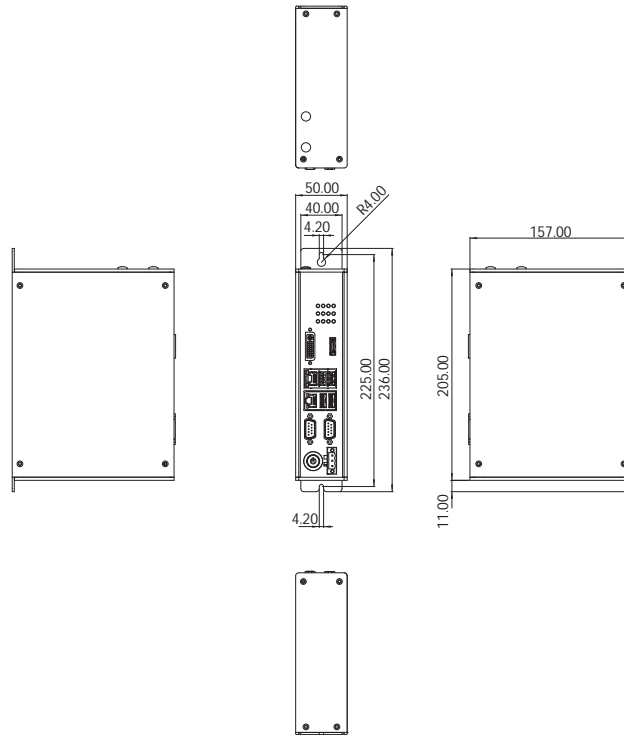
### Power Requirement

- Typical 24V DC input with ±20% range, with reverse polarity protection
- 1 x Optional 24V, 60W power adapter

### Dimensions

- 50mm (W) x 157mm (D) x 205mm (H)

## Dimension Drawing



### 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: -20°C to 80°C
- ♦ Relative humidity: 10% to 95% (non-condensing)
- ♦ Shock protection: 50G, half sine, 11ms, IEC60068-2-27
- ♦ Vibration protection w/ SSD condition:
  - Random: 2Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-64

### Support OS

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

### Certifications

- ♦ CE approval
  - EN61000-6-2
  - EN61000-6-4
- ♦ FCC Class A
- ♦ LVD

## Ordering Information

- ♦ **NIFE200S (P/N: 10J70020004X0)**  
Intel® Celeron® J1900 Quad Core 2.0GHz Slim Fanless System