



## Main Features

- OnBoard Intel® Atom™ D425 Processor, 1.8GHz
- Intel® ICH8M chipsets
- Dual Intel® GbE LAN ports Support WoL, Teaming, PXE
- 4 x USB 2.0
- 1 x RS232/422/485 and 3 x RS232
- 1 x Mini-PCIe with Two Antenna Holes and One SIM Card Holder
- 1 x DB15 Digital Input & Output
- Support +12VDC Input; Support ATX power mode

## Product Overview

Designed with Intel® D425 1.8GHz processor and ICH8M embedded chipset and 12VDC input to take a low power consumption advantage, NISE 103 is a compact fanless industrial computing housed in a size of 185mm x 131mm x 54mm. The NISE 103 supports three RS232, one RS232/422/485, two GbE LAN ports, four USB ports, one digital I/O, one VGA display, audio jack (speaker-out, Mic-in) and one external CF card socket. It is also a wireless-ready platform which has Mini-PCIe socket and SIM card holder onBoard to support optional GSM wireless module or Wi-Fi module (default). EZ Controller, NISE 103 has a digital I/O port which offers 8X isolated digital input/output channels.

With isolation protection of 2,500VDC, and dry contact support, NISE 103 can be applied to industrial and building automation applications. With rich I/O connection in palm-sized system, NISE 103 is an ideal fanless system for gate control, public information, self-service system, POS, Kiosk, low-power budget devices, and transportation applications etc.

## Specifications

### CPU Support

- OnBoard Intel® Atom™ D425 processor, 1.8GHz
- Intel® ICH8M chipsets

### Main Memory

- 1 x DDR3 SO-DIMM sockets, single channel, support up to 2GB DDR3 667/800 SDRAM, un-buffered and non-ECC

### I/O Interface-Front

- ATX power on/off switch
- HDD access/power status LEDs
- 3 x COM ports  
COM2: RS232/422/485  
COM3& COM4: RS232
- 2 x USB 2.0 port
- Audio jack (Line-out, Mic-in)
- 2 x Antenna holes

### I/O Interface-Rear

- 1 x VGA
- COM1: 1 x RS232
- 2 x Intel® GbE LAN port; Support WoL, Teaming and PXE
- 2 x USB 2.0 port

- +12VDC power input

- 1 x DB15 male digital input & output

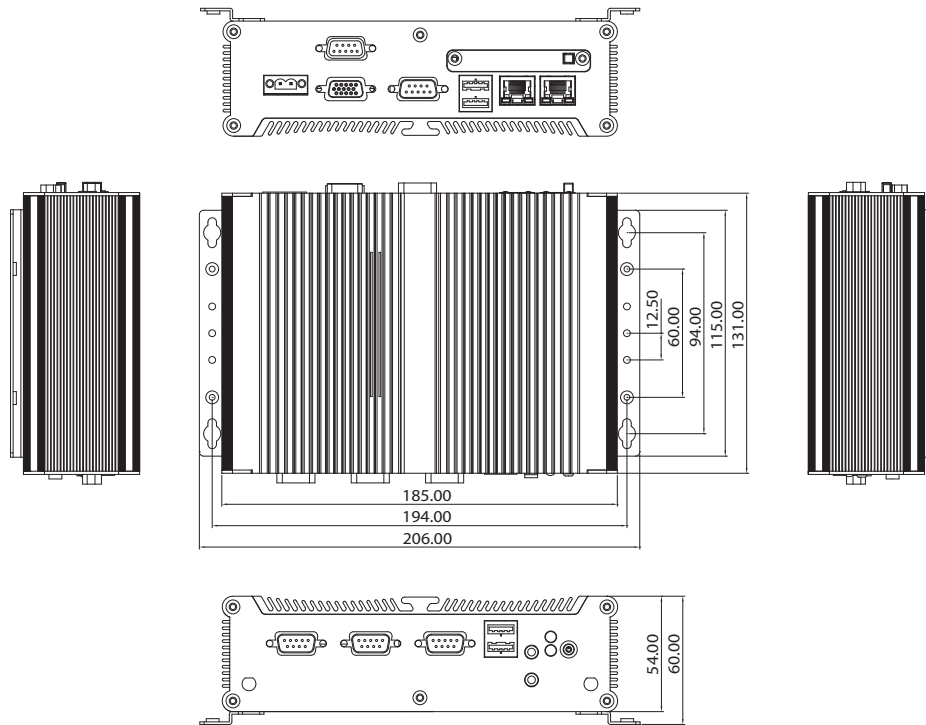
### Digital Input & Output

- 4 x Digital Input (Source type)
  - Input Voltage (Dry Contact):  
Logic 0: Close to GND  
Logic 1: Open
  - Input Voltage:  
Logic 0: 3V max  
Logic 1: +5V to +30V
- 4 x Digital Output
  - Supply voltage: 5 ~ 30VDC
  - Sink current: 200 mA max. per channel

### Device

- 1 x 2.5" HDD driver bay
- 1 x External CF Socket
- 1 x SATA DOM
- 1 x Mini-PCIe socket  
Default: support optional Wi-Fi module  
Option: support optional 3.5G module

## Dimension Drawing



### Power Requirements

- DC to DC power designed for onBoard support of +12VDC
- 1 x optional 12V, 60W power adapter

### Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) (7.28" x 5.2" x 2.13")

### Construction

- Aluminum 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 93% (non-Condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CF: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD Condition
  - Random: 0.5Grms @ 5 ~ 500Hz according to IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5 ~ 500Hz according to IEC60068-2-6

### Certifications

- CE approval
- FCC Class A

### OS Support List

- Windows XP 32bits
- Windows 7 32bits
- WinCE 6.0

## Ordering Information

### Barebone

- **NISE 103 (P/N: 10J00010300X0)**  
Intel® Atom™ D425 Fanless System
- **NISE 103D (P/N: 10J00010302X2)**  
Intel® Atom™ D525 Fanless System
- **12V, 60W AC/DC power adapter w/ o power cord (P/N: 7400060018X00)**