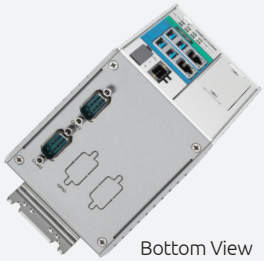
NIFE 105W

Dual Core Intel Atom® x5-E3930 Processor Automation System

Top View



Bottom View

Main Features

- Onboard Intel Atom® x5-E3930 processor Dual Core 1.8GHz
- 1 x HDMI display
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0
- 2 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 2 x RS232/422/485 with auto flow control
- 1 x External SD card slot and 1 x SIM card socket
- Support -5°C~55 °C operating temperature
- Support +24VDC input

Product Overview

NEXCOM's NIFE product line comes in a range of form factors and processor configurations including Intel Atom® and Intel® Core™ processors to suit different application requirements. For NIFE 105, it positions itself at the entry level of fieldbus controller, and suitable for M2M communication gateway and data server applications. Boosted by Intel® latest Apollo Lake-I processors and the palm size form-factor, NIFE 105 is the most suitable entry level automation system which satisfying the needs of steady system performance and installation in gateway field or a small controller cabinet.

NIFE 105 meets PLCopen® specifications and allows easy control programming via Softlogic tool kit. Using libraries of reusable logic and motion functionality, control schemes can be developed with reduced programming efforts for fast deployment of SoftPLC controller and M2M gateway.

Specifications

CPU Support

- Onboard Intel Atom® x5-E3930 processor Dual Core 1.8GHz

Main Memory

- Onboard type 4GB DDR3L RAM
  - Un-buffered and non-ECC

Display Output

- 1 x HDMI display

I/O Interface-Front

- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0 (900mA)
- 1 x External SD card slot (data storage only)
- 1 x FBI expansion slot
- 1 x Power/1 x HDD access LEDs
- 1 x Battery low/1 x GP0 programming LED
- 2 x Tx/Rx LEDs
- 1 x ATX power on/off switch

I/O Interface-Top

- 1 x Remote switch
- 1 x SIM card slot
- 1 x RTC battery socket

I/O Interface-Bottom

- 2 x DB9, support RS232/422/485 with Auto Flow Control
- 1 x Optional DB9, support 4 x GPI and 4 x GPO

Internal I/O Interface

- 1 x USB2.0, 500mA max.
- 1 x COM3, pin header, RS232 with Tx/Rx/RTS/CTS signal only
- 1 x COM4, pin header, RS232 with Tx/Rx/RTS/CTS signal only
- 4 x GPI and 4 x GPO (General purpose I/O), TTL 5V

Storage Device

- Onboard 16GB eMMC
- Optional mSATA module

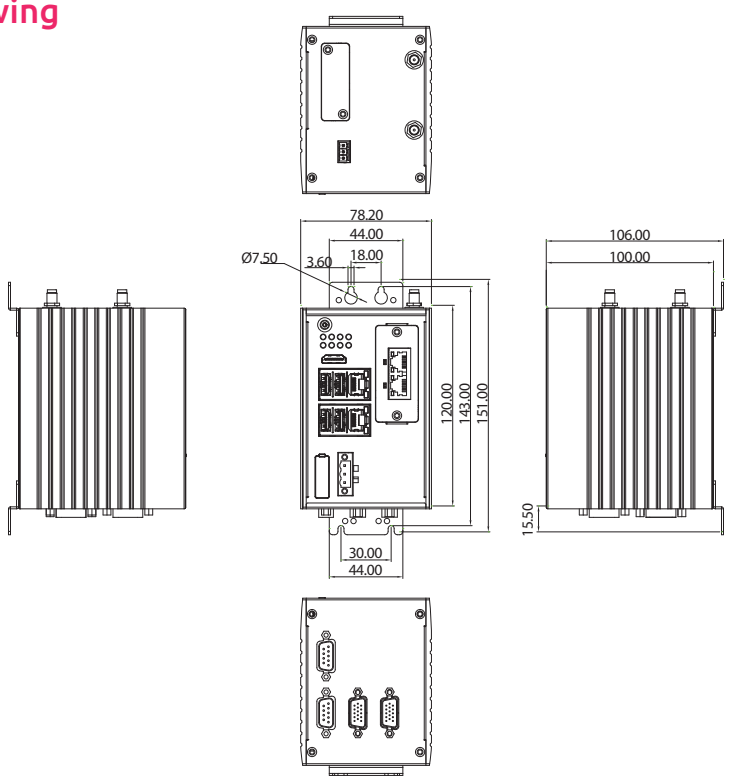
Expansion

- 1 x Full size mini-PCIe socket (USB+PCIe signal) for optional Wi-Fi/LTE/mSATA module
- 1 x Full size mini-PCIe socket (USB+PCIe signal) for optional modules

Power Requirement

- Power input: typical +24VDC ±20%
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Dimensions
- 78.2mm (W) x 100mm (D) x 120mm (H)

Construction
- Aluminum and metal chassis with front access design

Environment
- Operating temperature:
  Ambient with air flow: -10°C~60°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20~75°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - mSATA/eMMC: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ mSATA or eMMC condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A

Support OS
- Microsoft Windows 10 Enterprise 64-bit

Ordering Information

- **NIFE 105W system (P/N: 10J70010501X0)**
  Intel Atom® x5-E3930 Dual Core Factory Automation Fanless System with 4G memory, 16G eMMC onboard and one FBI opening
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

We reserve the right to change specifications and product descriptions at any time without prior notice.