



Main Features

- Onboard Intel® Quark processor X1021 single core 400MHz
- Wind River® or Yocto (only for NIO100y) operating system and McAfee® security software solutions
- Optional Wi-Fi or Wireless module
- 2 x 10/100 Fast Ethernet ports
- 1 x mPCIe slots for Radio module (only for NIO 100)
- 1 x mPCIe slot for FBI module (only for NIO 101)
- 2 x USB 2.0 type A
- 1 x RS232/485 selectable
- DIO 4x4
- Support 9~36V wide range DC input with phoenix x 2 pin terminal block
- Support -20 ~ 70°C extended operating temperature

Product Overview

NIO 100, designed as an IoT(Internet of Thing) gateway for cloud application specifically focused in industrial field, collects sensor data via RS232/485/DIO and transmitting data to cloud by 3G,WiFi or Ethernet. NIO 100 has power9~36V wide range DC inputs for industrial environment. NIO 100 is an Innovative and compactable new gateway for IoT target market to Industrial 4.0 a good product.

Specifications

CPU Support

- Onboard Intel® Quark SoC processor X1021 Single Core 400MHz

Main Memory

- DDR3 1GB
- eMMC 4GB

Serial Port

- 1 x RS232/485 (software selectable)

DIO

- 4 x 4 DIO supports

USB

- 2 x USB 2.0 Type A

Ethernet

- 2 x 10/100 Base-TX
- MDI/MDIX Auto cross

Reset

- 1x reset button

Expansion Slot

- 1x mPCIe, half/short size
- One for Wi-Fi/3G module (Optional)

Physical and Power

- DC 9~36V with 2 pins phoenix terminal block
- Din-Rail(optional)/Wall mountable
- Dimension: 130 x 130 x 60mm
- Weight: 700g (w/o bracket)

SW Features

- Moon Island Liunx 5.0.1
- Macfee security
- Web GUI management
- Xcare client
- Modbus TCP

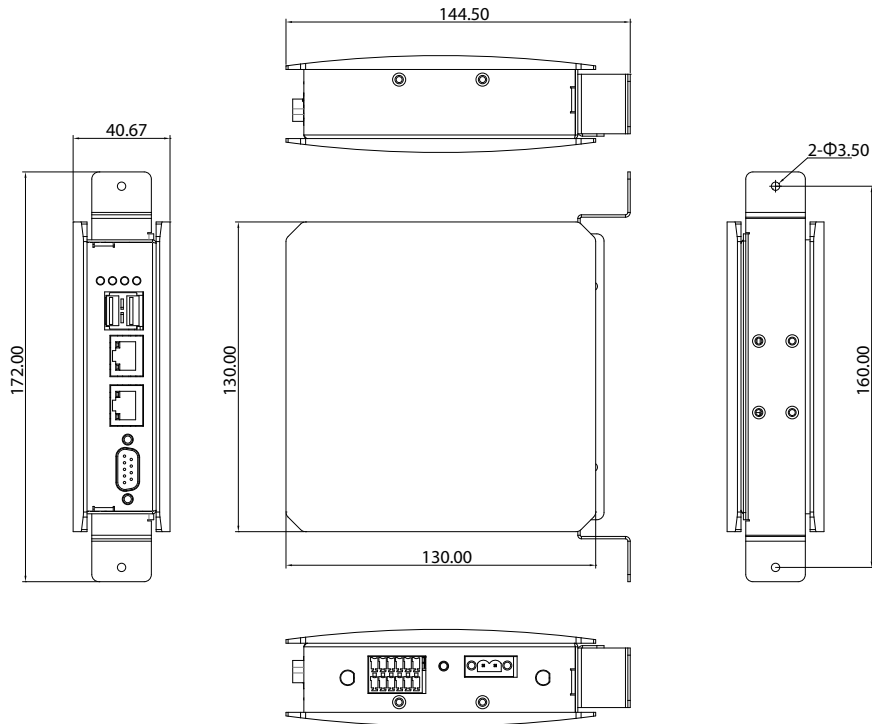
Environment Protection

- Operating temperature: -20°C ~ 70°C
- Storage temperature: -30°C ~ 80°C
- Pole/Wall mount kit x1

Mechanical Draft

- Wall Mounting
- Stand Rubber
- 110 x 110 x 60mm
- -20 ~ 70 degree C

Dimension Drawing



Ordering Information

Device	Description	Vendor	P/N
Adaptor	EU/Wall mount/12V/1.5A,Phonix 2-pin	FSP	TBD
Adaptor	US/Wall mount/12V/1.5A,Phonix 2-pin	FSP	TBD
Mounting	DIN Rail Mount	NEXCOM	TBD
Wi-Fi Module	IEEE 802.11b/g/n 1T1R WLAN+BT Bluetooth 4.0/3.0 + HS 2.4G Mini-PCle modules	AZUREWAVE AW-NB159H	7570LAN074X00
Wi-Fi Module	802.11a/b/g/n Half Mini Card, Atheros AR9382, 2T2R, MIMO 5G Mini-PCle modules	Sparlink WPEA-121N	7510LAN013X00
RF Antenna for WiFi			
3G Module	5-bands, 21M/5.7M DL/UL, w/ GPS and voice Mini-PCle modules	Telit HE910	7570LAN031X00
3G Module	HSPA+/UMTS quad-band 850/900/1900/2100 MHz GSM/GPRS quad-band 850/900/1800/1900 MHz Mini-PCle modules	Huawei MU609	7570LAN050X00
RF Antenna for 3G	Frequency Range..... 850/900/1800/1900/2100MHz 3G Penta Band Antenna Connector.....SMA Dimension: Ø9.4 x 27(W) x87.5/105(H)mm	San Jose EEN-502	TBD
4G LTE Module	LTE/DC-HSPA+/EGPRS Mini PCIe modules	Ublox	MPCL210
RF Antenna for 4G	Frequency Range..... 700MHz~960MHz / 1575MHz / 1710MHz~2700MHz Connector.....SMA Dimension: Ø13 x (W) x138/168(H)mm	Mgear LTE ANT	TBD
Z-wave	USB dongle	Sigmadesigns	ZM5101
	TBD	Mitsumi	CM-86