



## Main Features

- Robot connectivity: YASKAWA, KUKA, ABB, FANUC, TM, UR
- R2M communication: Modbus TCP, TCP/IP
- R2C communication: OPC UA, MQTT
- Support ROS applications

## Product Overview

NexCOBOT's SRB (Smart Robot Box) is a series of robot gateways that connects with major industrial robots. Through Modbus, TCP/IP, OPC, and MQTT protocols, users can easily integrate robot information to HMI, SCADA, or the cloud to implement M2M (machine-to-machine)/M2C (machine-to-cloud) communication.

## Specifications

### Robot Connectivity

- Supported Robots: YASKAWA, KUKA, ABB, FANUC, TM, UR
- Supported Protocols: Modbus TCP, OPC UA, MQTT
- Supported Functions: Read parameter, \*Write command (2020 Q2)
- Max Number of Connected Robots: 2

### CPU

- Intel® Atom™ Processor E3826. (1M Cache, 1.46 GHz)

### Main Memory

- On board 4GB DDR3L 1866 RAM

### Storage

- On board 32GB EMMC (optional mSATA module)

### Display

- 1 x HDMI display

### I/O Interface-Front

- ATX power on/off switch
- 1 x Storage/2 x GPO programmable LED
- 1 x SIM card holder
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI display output
- 4 x USB 2.0 (500mA per each)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

### I/O Interface-Rear

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: full RS232 signal
  - COM2: RS-232, only support Tx/Rx/GND
  - COM3: RS422/485 auto flow control
- 1 x Line-out
- Support 24V DC input

### I/O Interface - Internal

- 4 x GPI and 4 x GPO (programmable to GPI or GPO)
- 1 x DB9, only support RS232, Tx/Rx/GND single

### Expansion Slots

- 3 x Mini-PCIe socket for optional Wi-Fi/3.5G modules

mini-PCIe	Size	USB	PCIe	mSATA	3.5G/4G
CN5	Full	v	N/A	Support	Support
CN6	Full	v	v	N/A	Support
CN7	Half	v	v	N/A	N/A

### Power Requirements

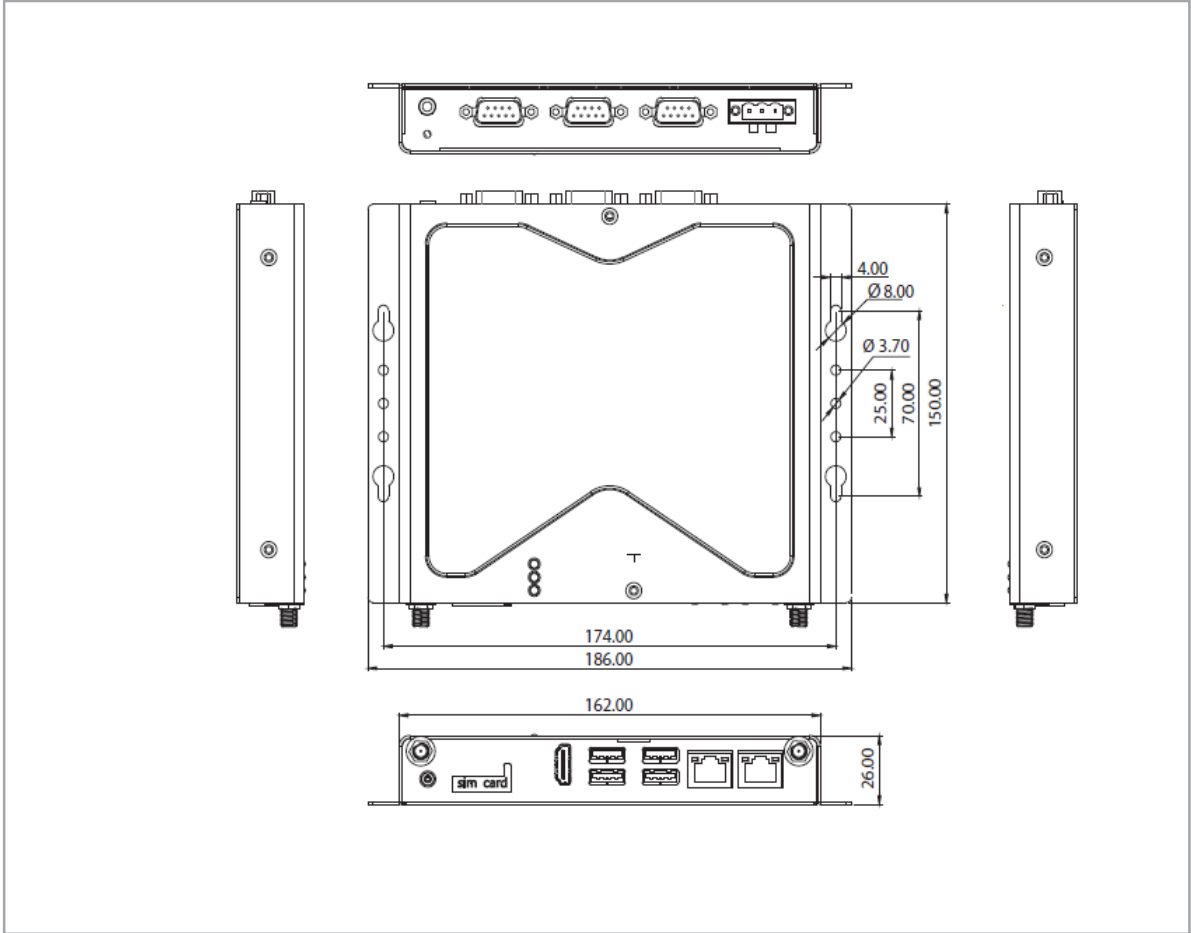
- Power input: 24V DC +/-20%
- 1 x Optional 24V, 60W power adapter

### OS Support List

- Ubuntu 16.04.5

### Dimensions

- 162mm (W) x 26mm (H) x 150mm (D) without wall-mount bracket



### 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 75°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection: mSATA/EMMC: 50G, half sine, 11ms, IEC60068-2-27
- 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
- FCC Class A

### Ordering Information

- **SRB 100 (P/N: 98ROBO000014F)**  
Smart Robot Gateway, Intel® Atom™ Processor E3826