

SRB 200/201

Smart Robot Gateway with Intel® Movidius™ Myriad X VPU
Intel® 6th Gen Core™ i7/i5 processor



Main Features

- Robot connectivity: YASKAWA, KUKA, ABB, FANUC, TM, UR
- R2M communication: Modbus TCP, TCP/IP
- R2C communication: OPC UA, MQTT
- Support ROS applications
- Supports AWS RoboMaker ROS applications
- Supports Intel OpenVINO Toolkit (optional)
- Supports AI inference with Intel® Movidius™ X VPUs (optional)

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. Moreover, SRB series leverages Intel's® Movidius™ Myriad™ X VPUs to run AI programs. Traditional robots can be fully upgraded with smart AI applications such as vision inspection and predictive maintenance.

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: 6

CPU

- SRB 200 (Intel® 6th Gen Core™ i5-6500, 3.20 GHz)
- SRB 201 (Intel® 6th Gen Core™ i7-6700, 3.40 GHz)

Chipset

- Intel® H110 Chipset

Main Memory

- SRB 200 (8GB DDR4 2400 RAM)
- SRB 201 (16GB DDR4 2400 RAM)

Storage

- SRB 200 (128GB 2.5" SATA3 MLC SSD)
- SRB 201 (256GB 2.5" SATA3 MLC SSD)

Display

- 1 x HDMI display
- 1 x VGA

I/O Interface-Front

- 1 x Power switch
- 2 x USB2.0
- 2 x LAN port

I/O Interface-Rear

- 2 x DB9 for RS232/422/485
- 1 x HDMI
- 4 x USB2.0
- 1 x DB15 for VGA
- 2 x LAN port (1 x PoE, IEEE 802.3af compliant)
- 1x 3pin Terminal block for DC24V in

Expansion Slots

- 1 x PCIe x16
- 1 x Mini PCIe

Power Requirements

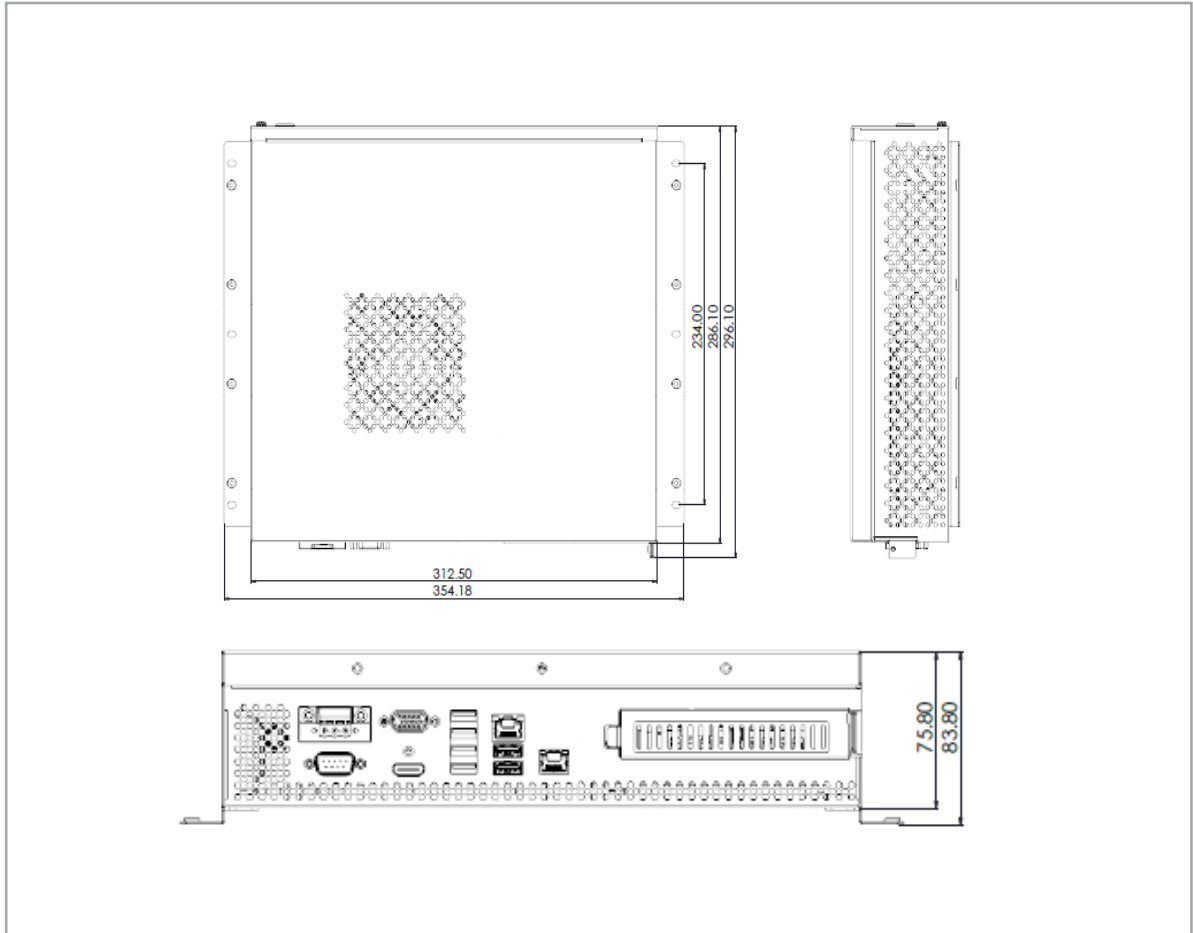
- Power input: 24V DC +/-10%

OS Support List

- Ubuntu 16.04.5

AI Inference Engine

- Optional AIBooster-L1/L2 (Intel® Movidius™ Myriad™ X MA2485 Accelerator Card)



Dimensions

- 312.5 X 286.1 X 75.8 mm (without mounting bracket)
- 354.18 x 286.1 x 83.8 mm (with mounting bracket)

Environment

- Board level operation temperature: 0°C to 50°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
 - 10% to 90% (operating, non-condensing)
 - 5% to 90% (non-operating, non-condensing)
- Vibration protection w/ HDD or SSD condition:
 - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
 - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- Meet CE / FCC Class A

Ordering Information

- **SRB 200 (P/N: 98ROBO000015F)**
Smart Robot Gateway, Intel® 6th Gen Core™ i5-6500 processor
- **SRB 201 (P/N: 98ROBO000016F)**
Smart Robot Gateway, Intel® 6th Gen Core™ i7-6700 processor