

ROS 2 AMR Controller for Navigation and Control Solutions with 11th Gen Intel® Core™ i5-1145G7E Processor





Front view



Rear view

Features

- 11th gen Intel® Core™ i5-1145G7E processor (Tiger Lake),
- 6 RS-232/422/485 and 2 CAN 2.0A/B
- Wide operating temperature from -40°C to +60°C
- Wide voltage input from 9 to 60 VDC
- Smart Ignition Management: USB power on/off control
- Supports Linux Ubuntu 22.04 LTS
- Supports Axiomtek AMR Builder Package



















▲ With cable lock bracket

Specifications

| Standard Color | Blue |
|-----------------------|--|
| Construction | Aluminum extrusion and heavy-duty steel |
| CPU | 11th gen Intel® Core™ i5-1145G7E processor, 15W |
| System Memory | 2 x 260-pin DDR4-3200 SO-DIMM, up to 64GB |
| System I/O Outlet | Front side 6 x Serial port (4-wire RS-232: TX/RX/RTS/CTS, RS-422, RS-485) with isolated 1.5kVDC, terminal block type 2 x CAN bus with isolated 1.5kVDC module (supporting the CAN 2.0A and CAN 2.0B protocols), terminal block type 1 x 8-bit GPIO, terminal block type 1 x Line-out & Mic-in 1 x Power button 1 x Reset button 2 x Antenna opening 1 x Front-access SIM slot Rear side 2 x HDMI 1.4b |
| | 4 x USB 3.2 Gen1 Type A with support for on/off control 2 x USB 2.0 Type A with support for on/off control 3 x 10/100/1000/2500 Mbps Ethernet (Intel® I226-IT) 1 x RS-232 for console port 4 x Antenna opening |
| Storage | 1 x M.2 Key M 2280 for NVMe 1 x 2.5" SATA (optional) |
| Expansion Interface | 1 x M.2 Key E 2230 for Wi-Fi/Bluetooth module 1 x Full-size PCI Express Mini Card slot (USB + PCIe signal) |
| System Indicator | 1 x Green LED for system power-on 1 x Orange LED for storage access |
| Power Supply | 9 to 60 VDC (typical VDC input 12/24/48V via Phoenix-type power connector) |
| Operating Temperature | -40°C to +60°C (-40°F to +140°F) with 0.5 m/s air flow |
| Humidity | 10% to 95% @ +40°C, non-condensing |
| Vibration Endurance | Random 3 Grms with SSD, 4 Grms with M.2, and 1 Grms with HDD; X, Y, Z Axis, 1 hour for each axis |



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Specifications

| Shock | Half sine wave, 3 times (each axis), acceleration: 50G |
|------------------------|--|
| Dimensions (W x D x H) | 250 (9.84") x 170 (6.69") x 62 (2.4") mm |
| Weight (net/gross) | 2.5 kg (5.51 lbs)/3.3 kg (7.27 lbs) |
| Certifications | CE, FCC Class A, UKCA |
| OS Support | Linux Ubuntu 22.04 LTS |

Ordering Information

Standard

ROBOX300 ROS 2 AMR controller with 11th gen Intel® Core™ i5-1145G7E processor

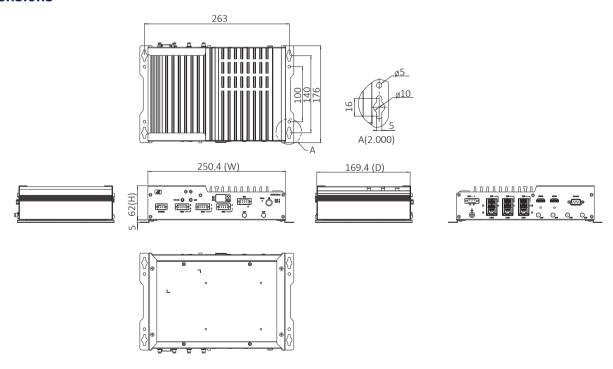
Software Support

Linux Ubuntu 22.04 LTS Axiomtek AMR Builder Package Intel® OpenVINO™ ROS/ROS 2

Optional Accessory

Wall mount kit
DDR4 SO-DIMM module
Cable lock bracket
SSD/HDD tray
M.2 NVMe/SATA SSD module
Wi-Fi/Bluetooth module
5G module
LTE module

Dimensions



^{*} Specifications and certifications may vary based on different requirements.