

# IBOX-600

## NVIDIA® Jetson Orin NX / Orin Nano Fanless Intelligent Computer



- ARM® Cortex®-A78AE 8-core Processor (Jetson Orin NX 16GB)
- 1024 NVIDIA® CUDA® Cores, 32 Tensor Cores
- 3 x M.2 Slots for Wi-Fi / WWAN / SSD Expansion
- 1 x CAN FD for Vehicle Connection
- JetPack™ SDK Includes Development Tools
- Wide-range Power Input 9~60VDC with Smart Power Management
- Wide-range Operating Temperature -25°C~70°C

## Edge AI Application



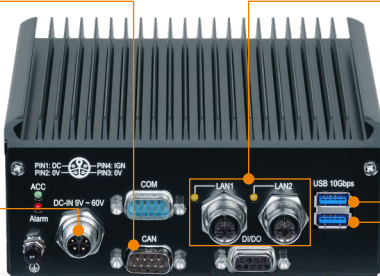
### CAN FD

Enables In-Vehicle Networking



### Wide Range Power Input

9~60V DC Input with Smart Power Management



### Dual Ethernet

RJ45/M12 Model Available



### 2.5 GbE

Connect to PoE Switch



### GbE

Perfect for LiDAR Connection



### Dual USB 3.2

High Speed Connection for Cameras or Sensors

## Specifications

### System

#### Module

- NVIDIA® Jetson Orin™ NX 16GB - 100 TOPS (1024 CUDA cores + 8-core ARM Cortex-A78AE CPU + 16 GB LPDDR5)
- NVIDIA® Jetson Orin™ NX 8GB - 70 TOPS (1024 CUDA cores + 6-core ARM Cortex-A78AE CPU + 8 GB LPDDR5)
- NVIDIA® Jetson Orin™ Nano 8GB - 40 TOPS (1024 CUDA cores + 6-core ARM Cortex-A78AE CPU + 8GB LPDDR5)
- NVIDIA® Jetson Orin™ Nano 4GB - 20 TOPS (512 CUDA cores + 6-cores ARM Cortex-A78AE CPU + 4GB LPDDR5)

#### Security

- Internal Security Subsystem with TrustZone

### Interface

#### Ethernet

- 2 x RJ-45 / M12 X-coded for 1 x 2.5GbE & 1 x GbE

#### USB

- 2 x USB 3.2 Type-A

#### Video Output

- 1 x HDMI 2.1 Type-A Supports 3840 x 2160@30Hz

#### Audio

- 1 x HD Audio from the HDMI

#### Serial Port

- 1 x DB-9 for RS-232/422/485

#### CAN Bus

- 1 x CAN FD

#### GPIO

- 1 x DB-9 for 4 x DI / 4 x DO

#### Mgmt. Port

- 1 x USB Type-C for System Recovery (Device only)

#### SIM Card

- 1 x Nano SIM Card Slot

#### Antenna

- 5 x Pre-cut Holes for External SMA Antenna

#### RTC Battery

- High-capacity Coin Cell Battery for RTC

#### UPS

- UPS for System Power Backup

### Internal Expansion

- 1 x M.2 2230 Key E slot
- 1 x M.2 3042/52 Key B slot
- 1 x mPCIe Full-size slot (USB 2.0 supported)

### Storage

#### Internal

- 1 x 512 GB NVMe SSD

### Software

#### Operating System / SDK

- NVIDIA® JetPack 5.1.1 SDK includes Jetson Linux, CUDA 11.4, TensorRT 8.5.2, cuDNN 8.6.0

### Environmental

#### Operating Temp.

- -25 ~ 70°C, ambient w/ 0.6m/s airflow
- \*Operating temp. varies by accessories installed.

#### Storage Temp.

- -40 ~ 80°C

#### Relative Humidity

- 10% RH – 90% RH (non-condensing)

#### Certification / Standard

- CE, FCC Part-15 Class A, E-mark\*, EN50155\*, EN45545 (R25)\* \*Ongoing

### Power

#### Power Input

- 1 x DC 9 ~ 60V with Smart Power Management, OCP and OVP

### Mechanical

#### Construction

- Aluminum Alloy

#### Thermal Design

- Fanless Passive Cooling Design

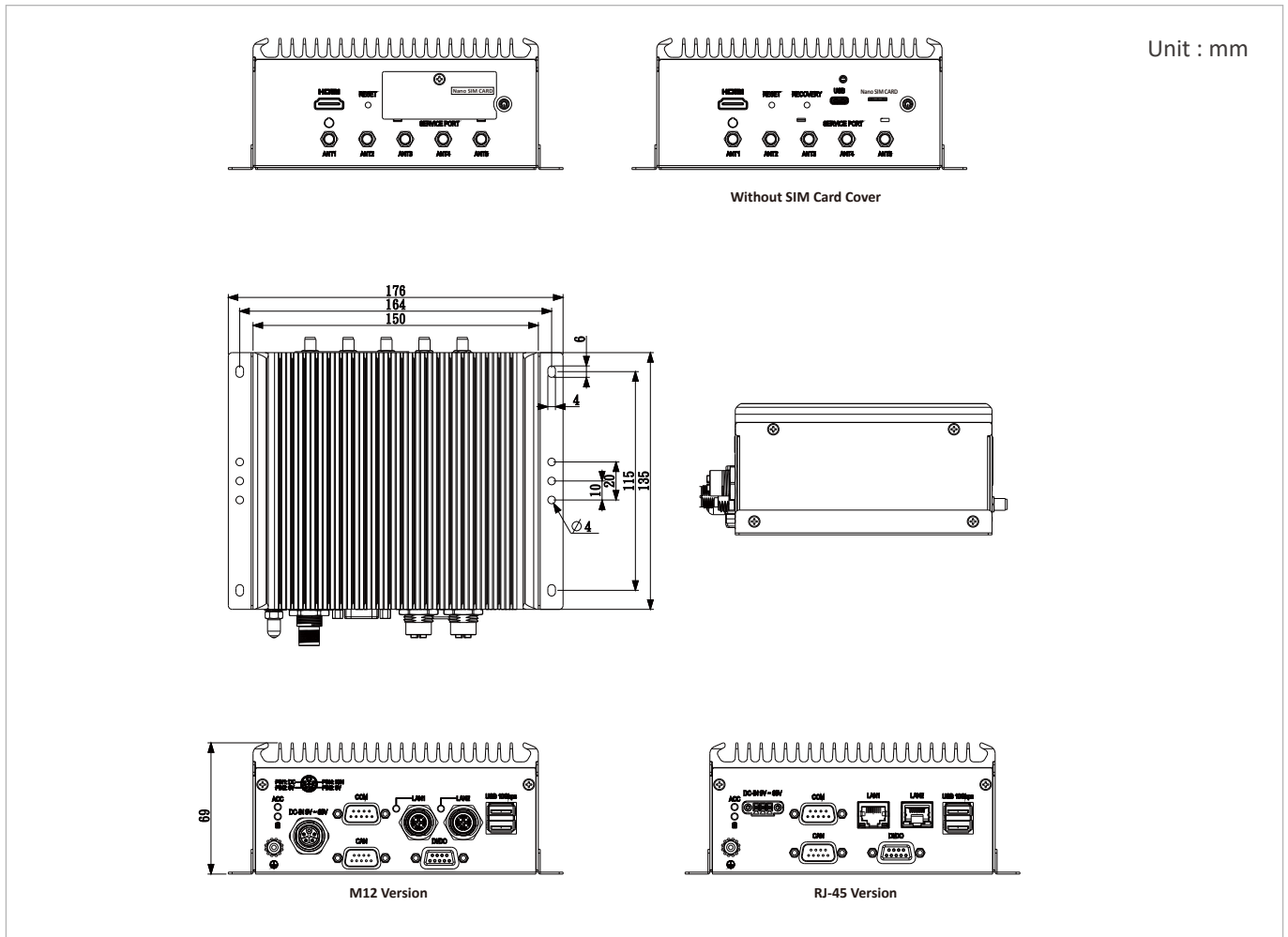
#### Mounting Method

- DIN-rail, Wall Mount

#### Dimensions

- 150 mm (L) x 135 mm (W) x 66 mm (H)

## Dimensions



## Ordering Information

Model Number	IBOX-600-xxxx-yyyyy (xxxx= ----= ETH w/ RJ-45, xxxx=M12X= ETH w/ M12 X-coded) yyyyy=ONX16=Jetson Orin NX 16GB / yyyyy= -ONX8=Jetson Orin NX 8GB yyyyy= --ON8=Jetson Orin Nano 8GB / yyyyy= --ON4=Jetson Orin Nano 4GB *Jetson Orin SoM Lifecycle is available through January 2030.
Description	NVIDIA® Jetson Orin NX / Nano SoM w / 2x LAN/ 1x HDMI / 1x CAN bus / DC 9-60V / Intelligent Computer
State of Origin	Made in Taiwan

## Optional Accessories

Wi-Fi + Bluetooth	M.2 Wi-Fi Module
WWAN Modem	M.2 WWAN Modem
GPS	mPCIe GPS Module
Mounting kit	DIN Rail / VESA Kit

All specifications are subject to change without notice.