

# IBOX-600-IP66

## NVIDIA® Jetson Orin NX / Nano Fanless Edge AI Computer



- NVIDIA® Jetson Orin™ NX SoM with 1024 CUDA Cores
- IP66 Design (Waterproof and Dustproof) for Harsh Environment
- 2 x Ethernet with M12 Connectors
- 9-60VDC Input with Built-in Smart Power Management
- -25~ 70°C Operating with Fanless Design
- Optional Backup Battery for Emergency

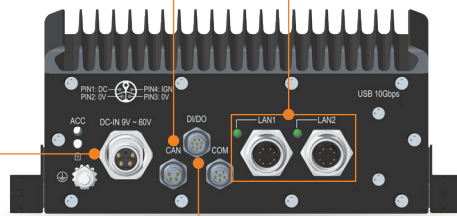
## Edge AI Application



**CAN FD**  
Enables In-Vehicle Networking



**Wide Range Power Input**  
9~60V DC Input with Smart Power Management



**Dual Ethernet**  
M12 Model Available



**2.5 GbE**  
Connect to PoE Switch



**GbE**  
Perfect for LiDAR Connection



**DI/DO**  
Alarm System/Indicator, Air Exhaust Control

## Specifications

### System

- Module**
- NVIDIA® Jetson Orin™ NX 16GB (1024 CUDA cores + 8-core ARM Cortex-A78AE CPU + 16 GB LPDDR5)
  - NVIDIA® Jetson Orin™ NX 8GB (1024 CUDA cores + 6-core ARM Cortex-A78AE CPU + 8 GB LPDDR5)
  - NVIDIA® Jetson Orin™ Nano 8GB (1024 CUDA cores + 6-core ARM Cortex-A78AE CPU + 8GB LPDDR5)
  - NVIDIA® Jetson Orin™ Nano 4GB (512 CUDA cores + 6-cores ARM Cortex-A78AE CPU + 4GB LPDDR5)
- Network**
- Intel® 2.5GbE, SoM Built-in GbE
- Security**
- Platform Security Controller (PSC), Security Engine (SE)

### Interface

- Ethernet**
- 2 x M12 X-coded connectors for 1 x 2.5GbE & 1 x GbE
- USB**
- 2 x USB 3.2 Type-A with Covers \* Two ports share 10Gbps bandwidth
- Video**
- 1 x HDMI Type-A output supports 4K resolution
- Audio**
- 1 x HD audio output from the HDMI
- Serial Port**
- 1 x M8 A-coded connector for RS-232/422/485
- CAN Bus**
- 1 x M8 A-coded connector for CAN FD
- GPIO**
- 1 x M8 A-coded connector for 3 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 External SMA Antenna holes with covers

### Internal Expansion

- M.2 Slot**
- 1 x M.2 3042/52 Key B slot (USB3.0) with a Nano SIM Card Slot
  - 1 x M.2 2230 Key E slot
- mPCIe Slot**
- 1 x mPCIe Full size slot (USB.2.0 supported)

### Storage

- Type**
- 1 x M.2 2280 Key M slot supports NVMe SSD (Pre-installed system BSP)

### Power

- Supply Voltage**
- 1 x M12 K-coded for DC-IN 9 ~ 60V
  - Supports Smart Power Management, OCP and OVP
- RTC Battery**
- High-capacity coin cell battery for RTC
- UPS (Option)**
- Backup battery for System Power Backup

### Software

- Operating System / BSP**
- NVIDIA® JetPack including Jetson Linux, NVIDIA® development tools

### Environmental

- Operating Temp.**
- -25°C ~ 70°C (-13°F ~ 158°F), ambient w/ 0.6m/s airflow
  - \* Operating temp. varies by accessories installed.
- Storage Temp.**
- -40°C ~ 80°C (-40°F ~ 176°F)
- Relative Humidity**
- 10% RH – 90% RH (non-condensing)
- Vibration**
- Random - IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis
  - MIL-STD-810G - Method 514.6, Procedure I, Category 4
- Shock**
- MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD

### Certification / Standard

- CE, FCC Part-15 Class A, E-mark, EN 50155, EN 45545-2 (R25)

### Ingress Protection

- IP66

### Mechanical

**Construction**

- Aluminum alloy

**Thermal Design**

- Fanless passive cooling design

**Mounting**

- Wall-mounting

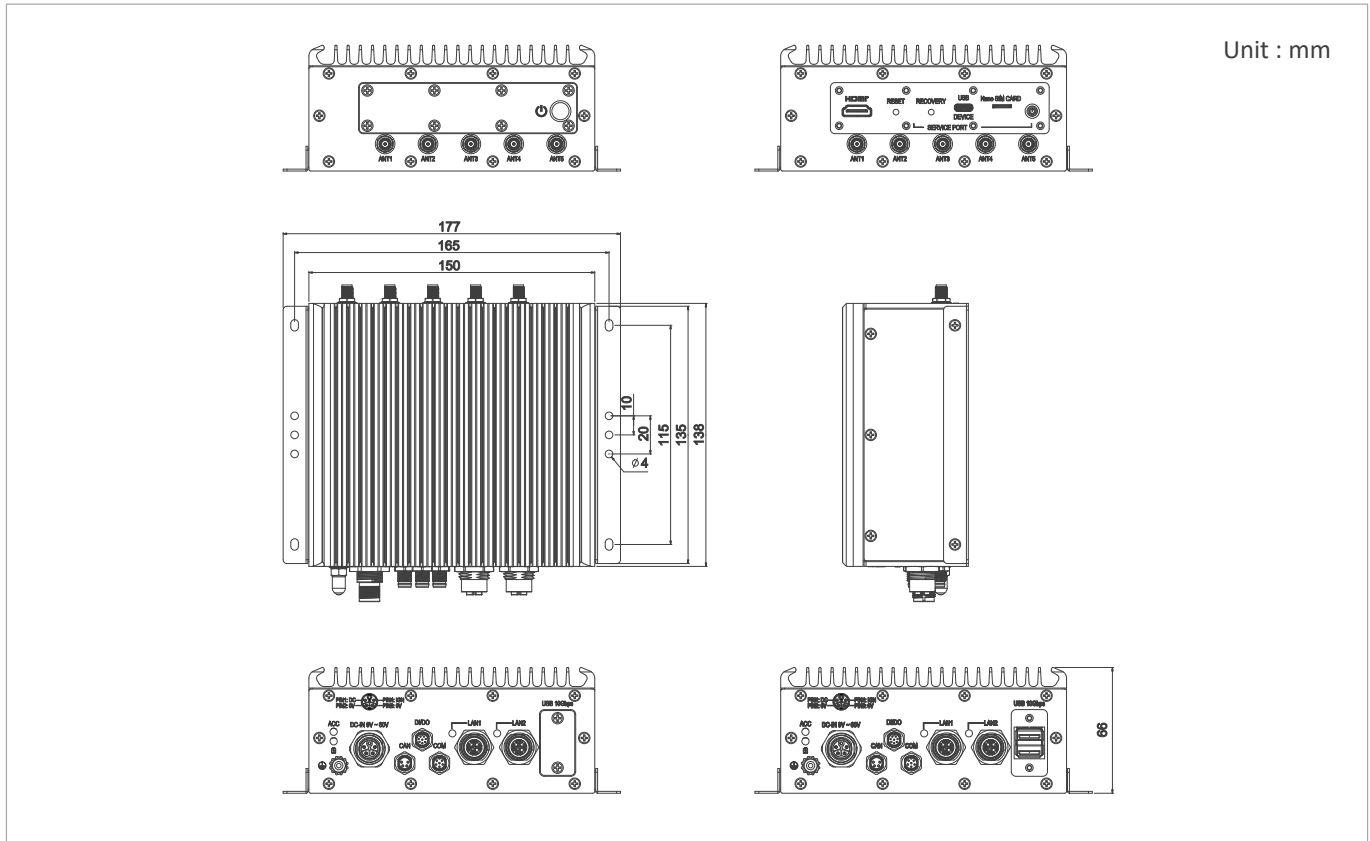
**Weight**

- 1630 g

**Dimensions**

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

## Dimensions



## Ordering Information

Model Number	IBOX-600-IP66-ONX16	NVIDIA® Jetson Orin™ NX 16GB / Model IP66
	IBOX-600-IP66-ONX8	NVIDIA® Jetson Orin™ NX 8GB / Model IP66
	IBOX-600-IP66-ON8	NVIDIA® Jetson Orin™ Nano 8GB / Model IP66
	IBOX-600-IP66-ON4	NVIDIA® Jetson Orin™ Nano 4GB / Model IP66
Description	NVIDIA® Jetson Orin™ NX / Nano SoM w/ 2x LAN/ 1x HDMI / 1x CAN bus / DC 9-60V / IP66 Edge AI Computer	
State of Origin	Made in Taiwan	

\*NVMe SSD performance could be limited according to the storage capacity  
 Jetson Orin SoM Lifecycle is available through January 2032.

## Optional Accessories

Storage*	M.2 2280 NVMe SSD 240GB / 480GB / 960GB
Wi-Fi	M.2 2230 Wi-Fi Module
WWAN Modem	M.2 3042/52 WWAN Modem
GPS	mPCIe GPS Module
UPS	BAT-2300v2 (Operating Temp. : -20°C ~ 60°C / -4°F ~ 140°F)

\*The NVMe SSD is a mandatory accessory for this product.

All specifications are subject to change without notice.