

## 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

## DIO

- 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

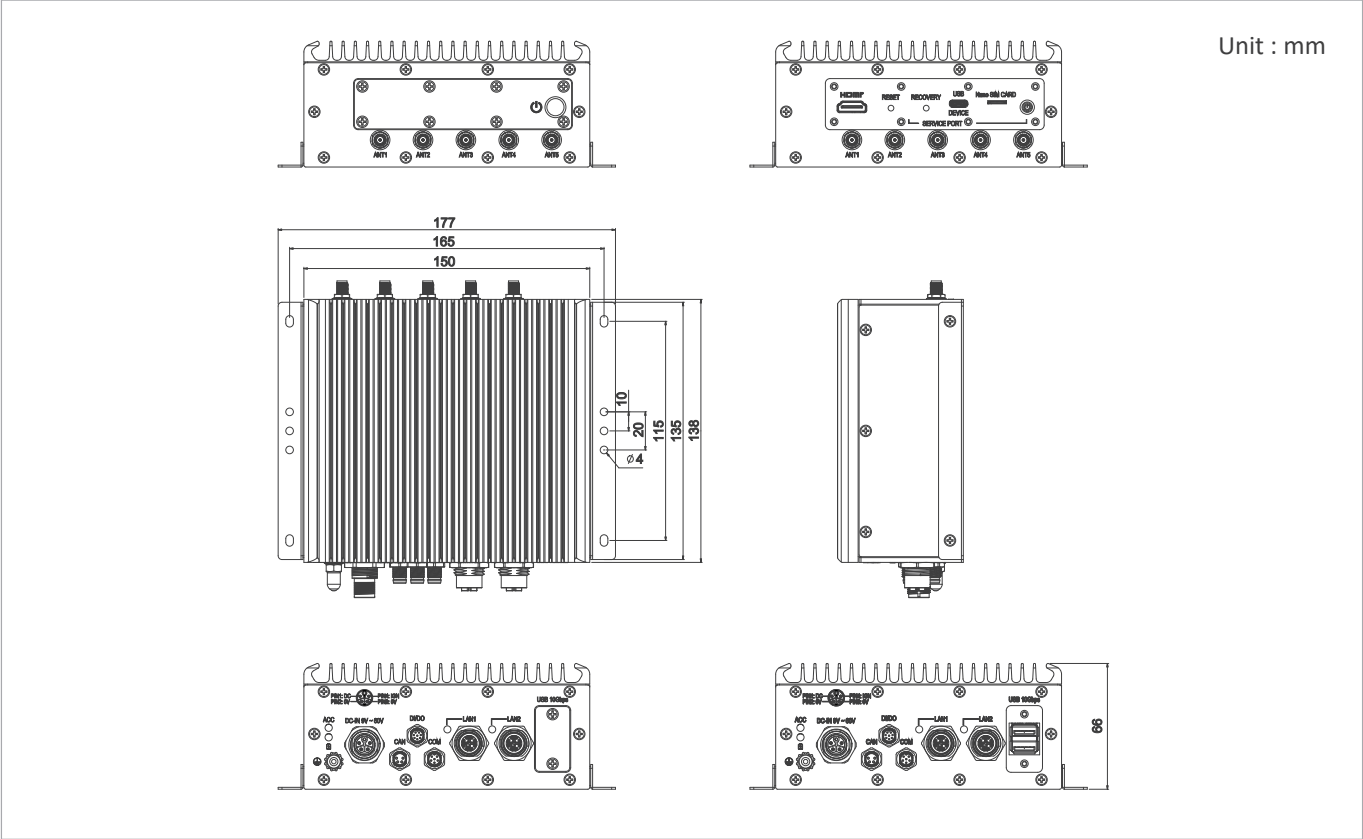
## Shock

- 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.