IBOX-600-IP66

NVIDIA® Jetson Orin NX / Nano
Fanless Edge AI Computer

IP66 WATERPROOF

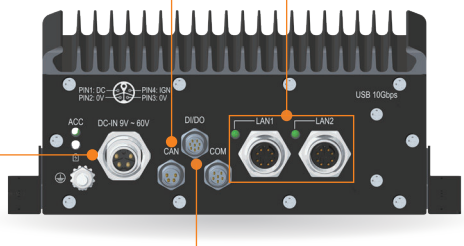
NVIDIA JETSON

- 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 - 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)

Network
- Intel® 2.5GbE, SoM Built-in GbE

Security
- Platform Security Controller (PSC), Security Engine (SE)

Interface

Ethernet
- M12 X-coded 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 2.1 output supports 4K resolution

Audio
- 1 x HD audio output from the HDMI

Serial Port
- 1 x M8 A-coded for RS-232/422/485

CAN Bus
- 1 x M8 A-coded for CAN FD

GPIO
- 1 x M8 A-coded 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 External SMA Antenna holes with covers

Internal Expansion

- 1 x M.2 2230 Key E slot
- 1 x M.2 3042/52 Key B slot with nano SIM card 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

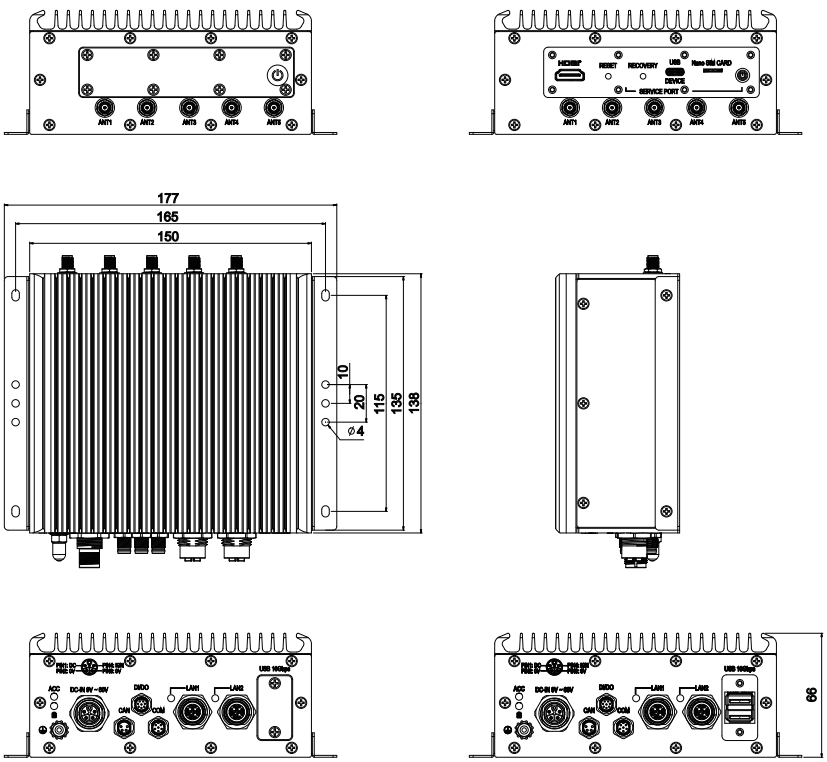
• IP66

Mechanical

Construction
• Aluminum alloy
Thermal Design
• Fanless passive cooling design
Mounting
• Wall-mounting
Weight
• 1400 g
Dimensions
• 150 mm (L) x 135 mm (W) x 66 mm (H)

Dimensions

Unit : mm



Ordering Information

Model Number	IBOX-600-IP66-ONX16-S05	NVIDIA Jetson Orin NX 16GB / SSD 480GB / Model IP66
	IBOX-600-IP66-ONX8-S05	NVIDIA Jetson Orin NX 8GB / SSD 480GB / Model IP66
	IBOX-600-IP66-ON8-S05	NVIDIA Jetson Orin Nano 8GB / SSD 480GB / Model IP66
	IBOX-600-IP66-ON4-S05	NVIDIA Jetson Orin Nano 4GB / SSD 480GB / Model IP66
	IBOX-600-IP66-ON4-S02*	NVIDIA Jetson Orin Nano 4GB / SSD 240GB / Model IP66
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	

*NVMe SSD performance could be limited according to the storage capacity

Jetson Orin SoM Lifecycle is available through January 2030.

Optional Accessories

Wi-Fi	M.2 2230 Wi-Fi Module
WWAN Modem	M.2 3042/52 WWAN Modem
GPS	mPCIe GPS Module
UPS	BAT-2300v2

All specifications are subject to change without notice.

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