

AES-ORNXE

NVIDIA® Jetson Orin™ NX AI Computing System



Features

- Powered by NVIDIA® Jetson Orin™ NX
- Onboard 16GB / 8GB 128-bit LPDDR5
- Multiple I/O interface connections for data collection
- Gigabit LAN, USB 3.1, Serial Port, CAN-FD
- Wide operating temperature range -20°C to 60°C



Specification

System

CPU/GPU	NVIDIA® Jetson Orin™ NX 8/6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores
Memory	Onboard 16GB / 8GB 128-bit LPDDR5
Storage	1 x M.2 M-Key 2280, support NVMe
Real time clock	Yes
Indicators	LED indicator x 1 (Power)
Wireless	1 x M.2 E-Key 2230 1 x M.2 B-Key 3052
Operating System	Linux (NVIDIA Jetpack 5.1.1 and above)

Power Supply

Power Requirement	9 to 36 VDC
Power Consumption	Max. 25W (with Fan)
MTBF (Hours)	--

Environmental and Mechanical

Dimension	136mm x 110mm x 57mm
Weight	0.9 kg
Mouting/Installation	Din Rail, Wall Mount, VESA
Operating Temp.	-4 °F ~ 140 °F (-20 °C ~ 60 °C)
Storage Temp.	-40 °F ~ 176 °F (-40 °C ~ 85 °C)
Operating Humidity	10% ~ 95% relative humidity, non-condensing

Certification

Regulations	CE, FCC
Carrier	Planning

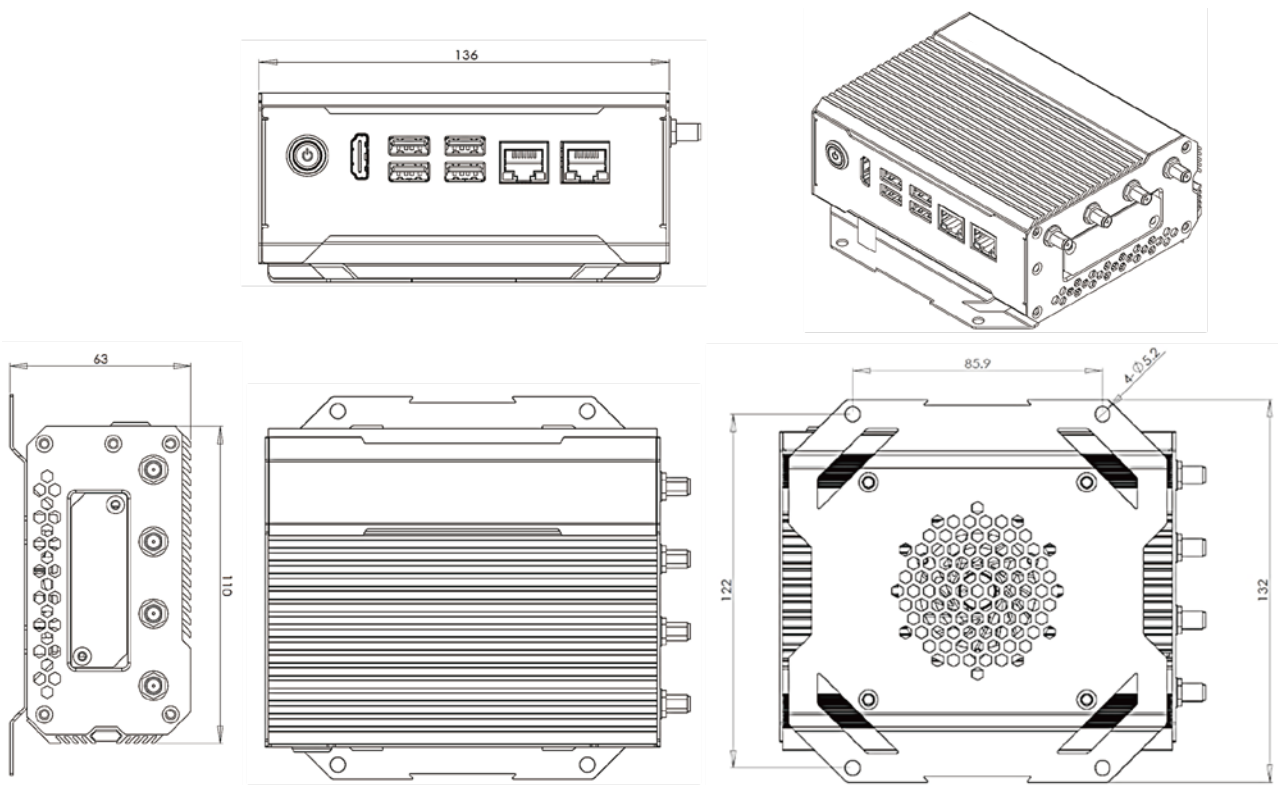
Interface

Serial Port	1 x RS-485
CAN Bus	1 x CAN bus
Ethernet	2 x GbE LAN, RJ45
USB	4 x USB 3.1, Type-A
DI/DO	--
AI/AO	--
Display	1 x HDMI 2.0-Out
Power Connector	Terminal Block
Debug Port	1 x Micro USB for console
Expansion Slot	1 x SIM card slot 1 x Micro SD slot
Other Interface	--

Radio Frequency

LTE 4G (CAT 1) (Optional)	3GPP Rel.9 compliant protocol Frequency bands: FDD LTE: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19 /B20 /B25/B26/B28 TDD LTE: B38/B39/B40/B41 WCDMA: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8 SIM card size: Micro-SIM slot Antenna type: External type Antenna connector: SMA-Male
GPS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo

Dimensions



Packing List

- AES-ORNXE BOX x1
- 3-pin Terminal block Connector x1
- 5-pin Terminal block Connector x1
- Wall Mount x1

Ordering Information

AES-ORNXE1	NVIDIA® Jetson Orin™ NX, 8GB, 9 to 36VDC
AES-ORNXE2	NVIDIA® Jetson Orin™ NX, 16GB, 9 to 36VDC
AES-ORNXE3	NVIDIA® Jetson Orin™ NX, 8GB, 128GB NVMe, 9 to 36VDC
AES-ORNXE4	NVIDIA® Jetson Orin™ NX, 16GB, 128GB NVMe, 9 to 36VDC

Optional Accessories

4170A000012	Cable, DC Jack to 2P, L=50
4B01XUD12060AS3	Adapter (In: 100-240V / Out: DC 12V 5A 60W)
4K02X00000030AR	Power Cord EU
4K02X00000020AR	Power Cord US