

MIC-715-0X

Ruggedized In-Vehicle AI Fanless System Based on NVIDIA® Jetson Orin™ NX

Preliminary



Features

- Ruggedized IP67 waterproof fanless design
- Embedded with NVIDIA® Jetson Orin™ NX up to 100 TOPS
- 2 x GbE and 4 x PoE with IEEE 802.3af compliance
- 2 x USB 3.0, 1 x CANbus, 1 x HDMI
- Supports 2 x mPCIe, 1 x M.2 3052, 1 x M.2 2280
- Supports Allxon 24/7 remote monitoring and OTA deployment



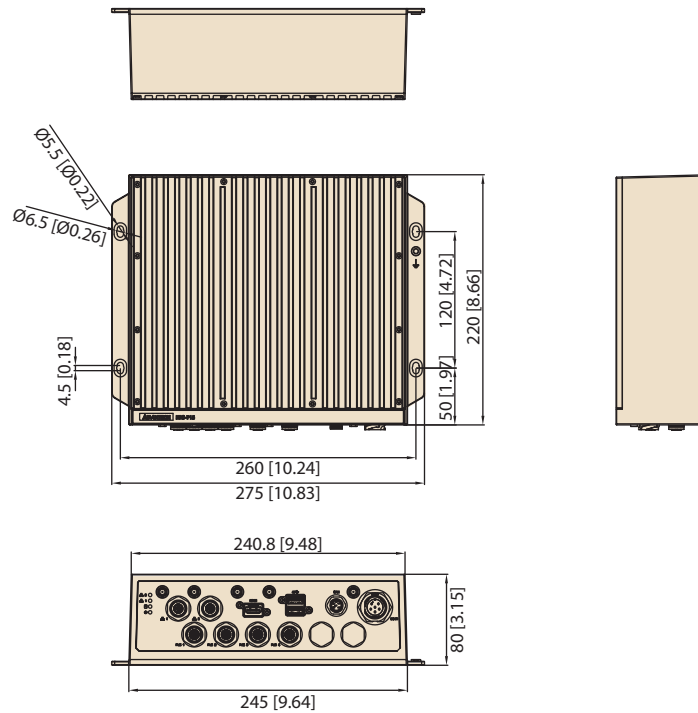
Specifications

		NVIDIA® Jetson Orin™ NX
Processor System	CPU	16GB: 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU
	GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores
	Memory	16GB LPDDR5
	Flash	-
I/O	Ethernet	6 x 10/100/1000 Mbps (4 x PoE support, IEEE 802.3af) in M12 X-coded, 8-pin female connector
	Display	HDMI (Max. resolution 3840x2160 @ 60Hz)
	USB	External: 2 x USB 3.0
	CANBus	1 x CANBus
	OTG USB	1 x Micro USB
Expansion	Mini PCIe	2 x mPCIe (signal: PCIe + USB)
	SIM	1 x Nano SIM slot
	M.2	1 x M.2 3052 (B-Key, signal: PCIe + USB)
Storage	M.2	1 x M.2 2280 M-Key (NVMe, PCIe x1)
	SD Card	1 x Micro SD slot
Power	Mode	M16, 6-pin male
	Input power	12/24V _{DC} (12-6A) with ignition *Note1
Environment	Operating Temperature	-20 ~ 60 °C with 0.7 m/s airflow (Max-N ARM mode)
	Operating Humidity	95% @ 40 °C (non-condensing)
	Vibration	3 Grms @ 5 ~ 500 Hz, random, 1 hr/axis
	Shock	10G/11ms
Mechanical	Dimensions (W x D x H)	275 x 220 x 80 mm (10.8" x 8.7" x 3.2")
	Weight	4.5 kg
	Installation	Desktop
BSP	Jetpack	Above 5.1
Certifications		CB/UL/CE/FCC/CCC (No RED certification)

Note1: Default setting is 12V DC in. If the power source is 24V, please open the case and adjust the SW1 DIP switch to 01 for 24V DC in.

Dimensions

Unit: mm



Ordering Information

Part Number	NVIDIA Module	Memory	eMMC	NVMe**
MIC-715-OXA1	Orin NX	16GB	NA	128GB

** The system BSP will be pre-installed in a 128GB NVMe M.2 SSD.

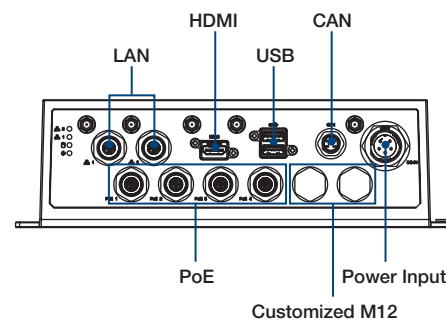
Optional

Part Number	Description
1700025503-01	M Cable Waterproof 8P/RJ45-8P8C 100cm (M12 to RJ-45)

Optional for Development/Testing Only

Part Number	Description
XSK320-LRS-150-12*	Open Frame, A/D 100-240V 150W 12V
1700022250-21*	A Cable Waterproof 5P(F) 200cm (CAN cable)
1700001524*	Power Cord UL 3P 10A 125V 183cm (US)
170203183C*	Power Cord EU 3P 2.5A 250V 183cm (EU)
170203180A*	Power Cord BSI 3P 2.5A 250V 183cm (UK)
1702031836*	Power Cord SAA 3P 10A 250V 183cm (AU)
1700008921*	Power Cord PSE 3P 7A 125V 183cm (Japan)
1700019146*	Power Cord CCC 3P 2.5A 250V 183cm (China)

Front View



Packing List

Part Number	Description	Quantity
MIC-715-OXA1	Ruggedized AI System based on Orin NX	1
1700023619-01	Micro USB Cable	1
1700032301-01	6-pin M12 power cable	1
1930005673-11	M2 Screws	2
1930008089	Mini PCIe Screws	2

Remote Management Enrollment

Enroll in 24/7 secure service to get all the features of remote device management on one centralized cloud portal - Allxon Portal.

Enrollment Page: https://allxon.com/jetson/device_enroll/