

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, 2 x CAN bus, 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
- e-mark compliance

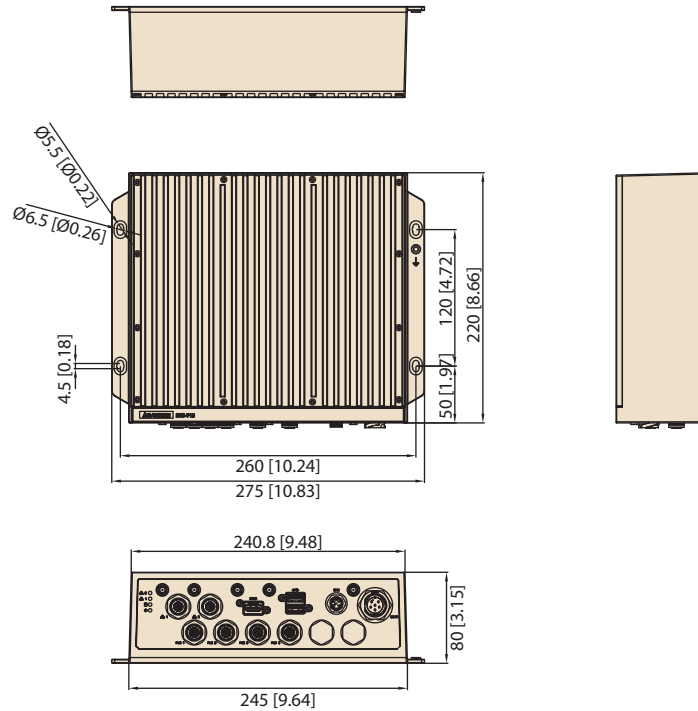
Specifications

		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 3840 x 2160 @ 60Hz)
	USB	External: 2 x USB 3.0
	CAN Bus	2 x CAN bus
	OTG USB	1 x Micro USB
Expansion	Mini PCIe	2 x mPCIe (signal: PCIe + USB)
	SIM	2 x Nano SIM slot (M.2 3052 & Mini PCIe2 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)
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

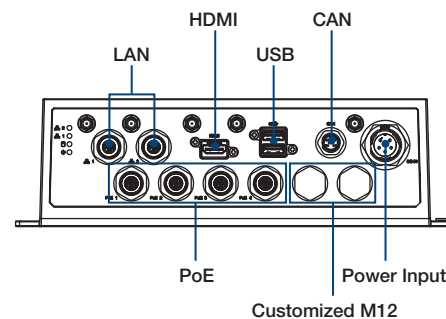
Part Number	NVIDIA Module	Memory	eMMC	NVMe**
MIC-715-OX4A1	Orin NX	16GB	NA	128GB

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

Optional

Part Number	Description
1700025503-01	M Series Waterproof Cable 8P/RJ45-8P8C 100cm (M12 to RJ-45)
98R27150000	M2 3052 / Mini PCIe module thermal kit
9656EWMG00E	Module Half card bracket
1700022250-21	Type-A Waterproof Cable 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-OX4A1	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

Optional for Development/Testing Only

Part Number	Description
XSK320-LRS-150-12	Open Frame, A/D 100-240V 150W 12V

Remote Management Enrollment

Enroll in 24/7 secure service to get all the features of remote device management on one centralized cloud portal - the Allxon Portal
 Enrollment Page: https://allxon.com/jetson/device_enroll/