MIC-736



Features

- Compact Fanless design (With fan kit option)
- Embedded with Dual NVIDIA® Jetson AGX Orin™
- 1792 CUDA® cores and 56 Tensor Cores
- Support 2 x 10GbE LAN+ 2 x CANBus
- Support FAKRA connectors (16-ch total GMSL2.0)
- Support PPS/PTP synchronization
- IP50 Certified Performance
- 20 to 70°C operating temperature support

Specifications

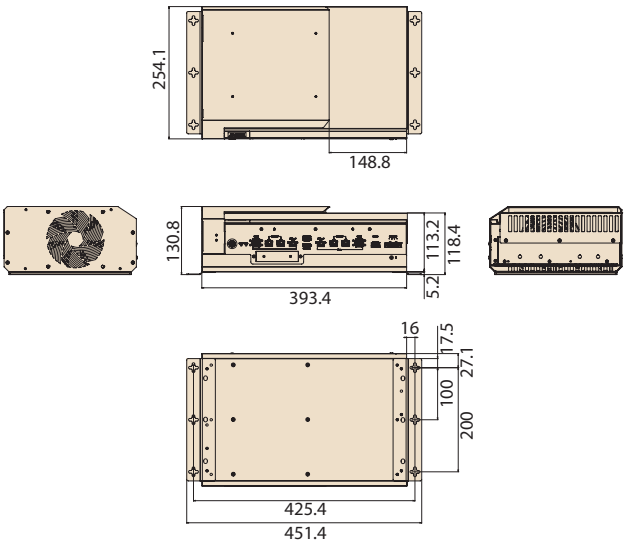
Processor	CPU	MIC-736-AO5A1 (32G+32G AGX Orin) 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
	GPU	1792-core NVIDIA Ampere c GPU with 56 Tensor Cores Maximum Operating Frequency: 2.2GHz
	Mem	64GB LPDDR5
	eMMC	64GB eMMC
I/O	Ethernet	4 x 10/100/1000/2500 Mbp 2 x 10GbE
	Display	2x HDMI Display
	USB	External: 4 x USB 3.2 Gen 2, 3 x USB micro B, (1 from UART for debug) Internal: 1 x USB 2.0 (pin header)
	CAN	2 x CANBus
	PPS in/out	2 x pin header
	Serial Ports	1 x COM port RS-232/422/485 (On board pin header)
Expansion	M.2	1 x M.2 3052 (B-Key) (Signal: USB 3.0+USB 2.0) 1 x M.2 2230 (E-Key) (Signal: PCIe+USB2.0)
	Mini PCIe	1 x mPCIe (Signal: PCIe+USB 2.0)
	SIM	1 x Nano SIM slots
	FAKRA	2 x FAKRA connectors (for 8-ch GMSL3.0/2.0)
	iDoor (Optional)	1 x iDoor bracket reserve
Storage	M.2	2 x M.2 2280 (B/M-Key, NVMe, Signal: PCIe x4)
Power	Mode	AT/ATX (Default AT)
	Input Voltage	19~36V_{DC}
Environment	Operation Temperature	-20 ~ 55 °C with 0.7 m/s air flow (fanless) -20 ~ 70 °C with fan kit
	Operating Humidity	95% @ 40 °C (non-condensing)
	Vibration	3Grms @ 5 ~ 500 Hz, random, 1 hr/axis
	Shock	10G / 11 ms Power / Reset / Recovery
Mechanical	Dimension (W x H x D)	350 x 250 x 105.2 (Fanless) 393.4 x 254.1 x 130.8 (with fan kit)
	Weight	12KG
	Installation	Desktop / Wall mount
BSP	Jetpack	Above 6.0
Certifications		CE / FCC / CCC

All product specifications are subject to change without notice.

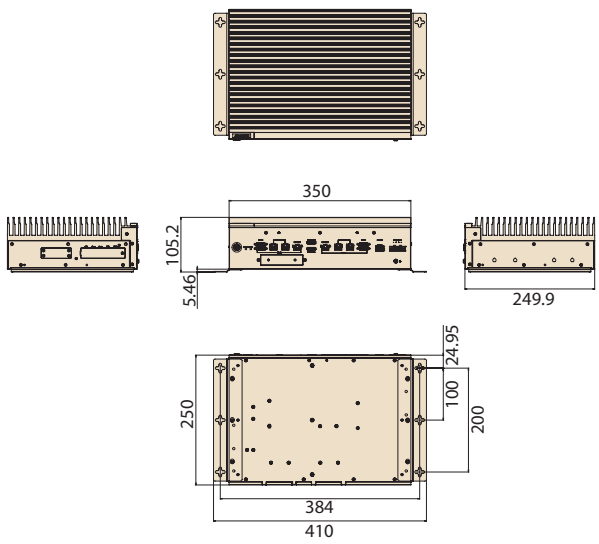
Dimensions

Unit: mm [inch]

With Fan Kit



Fanless



Ordering Information

Part Number	NVIDIA Module	Memory	EMMC	Remark
MIC-736-AO5A1	Dual AGX Orin	32GB	64G	Fan based
MIC736AO5A1-T	Dual AGX Orin	32GB	64G	Fanless

Packing List

Part Number	Description	Quantity
MIC-736-AO	AI Inference System	1
1652003234	Power terminal block	1
1700023619-01	Micro USB cable for system recovery	1
1652008025-01	Terminal Block 2x3/2.54/PA66/RA/Sn/BK/ L3.5/W SC	1
1960118288N001	Mounting bracket	2
1930006240-01	screw for mounting bracket	6
9656EWMG00E	Half-size miniPCIe to miniPCIe bracket set	1

Optional

Part Number	Description
MIC-FG-8G2C1	8CH GMSL2 frame grabber with mini FAKRA
1751000758-01	RF Cable MINI FAKRA B-Z/F FAKRA-Z/M 1x4 BLK L300
1751000805-01	Cable Ant. FAKRA-Z/F FAKRA-Z/F KS302 BLK L15M
96PSA-A84W12V1-4	A/D 100-240V 84W 12V C14 DC JACK 62368 (External power supply for GMSL)
1700026907-01	Cable 1x4P-2.0/1x4P-2.0 10CM (Internal power cable for GMSL)
AIW-212HU-001	Half size mini-PCIe, GNSS modul
96PSA-A230W24P4-3	Adaptor A/D, 100-240V, 230W, 24V
SQF-C8MV4-4TDEFC	SQF PCIe/NVMe Gen.4 M.2 2280 OPAL 730-D 4T 3D TLC BiCS5 (0~70°C)
EWM-W179M201E	Wi-Fi 6 + BT Module M.2 Key A/E
1751000620-01	Cable Ant. SMA/F-R MHF4L/113 BLK L300mm
1751000460-01	Dipole Ant. WiFi 6E SMA/M-R BLK L111.7mm IP54
AIW-356-DQ 5G	Sub6+GNSS M.2 3052 Key B (by region)
1751000623-01	Cable Ant. SMA/F MHF4L/113 BLK L300mm (5G)
1750009372-01	Ant.SMA/M 90/180 5G BLK 167mm RG178 (5G)
1702002600	Power Cord (USA) UL/CSA, 3-pin, 10A, 125V, 1.83 M
1700029019-01	Power Cord (PSE/BSMI), 3-pin, 7A, 125V, 1.8 M, DAC-ST01
1702002605	Power Cord (EU) 2-pin, 10/16A, 220V, 1.83 M, 90 D
1702031801	Power Cord BSI 3P 10A 250V C13 183cm (UK)
1700020098	Power Cord SAA 3P 10A 250V C13 183cm (AU)
1700028677-01	Power Cord PSE 3P 7A 125V C13 180cm (Japan)
1700000596-11	Power Cord CCC 3P 10A 250V C13 183cm (China)

Front View

