

AIR-030

AI Inference System Based on NVIDIA® Jetson AGX Orin

Preliminary



Features

- Compact and high performance AI box up to 275 TOPS AI computing
- NVIDIA® Jetson AGX Orin built-in
- 9–36V wide power and -10–50 °C wide temp. supported
- Multiple IO ports: 3 x LAN, DIO, 4x COM, 4x USB 3.2 and USB type C
- Support various expansions 1 x M.2 2280(NVME), 1 x M.2 2230 and 1 x PCIe x 16 (optional)
- Linux Ubuntu 20.04 LTS and JetPack 5.0.1 preload
- Qualified for Edge AI SRP of WISE-DeviceOn

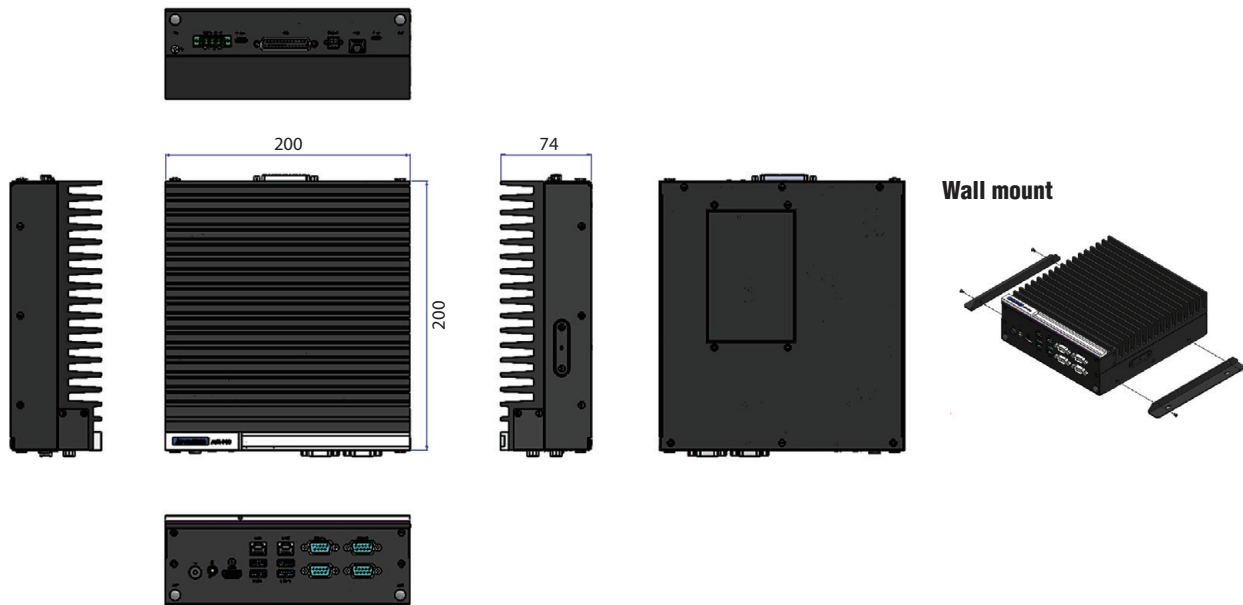


Specifications

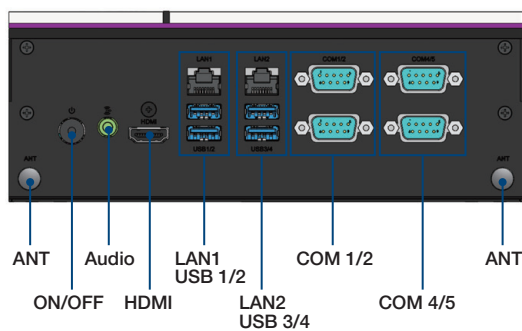
Processor System	CPU	JA0 64GB: 12-core NVIDIA Arm® Cortex A78AE v8.2 JA0 32GB: 8-core NVIDIA Arm® Cortex A78AE v8.2
	GPU	JA0 64GB: 2048-core NVIDIA Ampere GPU with 64 Tensor Cores Maximum Operating Frequency: 1.3GHz JA0 32GB: 1792-core NVIDIA Ampere GPU with 56 Tensor Cores, Maximum Operating Frequency: 939 MHz
	AI Performance Reference	JA0 64GB: Up to 275 Sparse TOPS (INT8) JA0 32GB: Up to 200 Sparse TOPs (INT8)
	Memory	JA0 64GB: 64GB 256-bit LPDDR5 DRAM JA0 32GB: 32GB 256-bit LPDDR5 DRAM
	Flash	64GB eMMC 5.1
Ethernet	Interface	RJ-45
	Controller	Intel® i225
	Speed	3 x Gigabit Ethernet (10/100/1000 Mbps, LAN1&2 optional PoE support)
Display	HDMI	1 x HDMI (Max. resolution 3840 x 2160 @ 60Hz)
IO Ports	USB	4 x USB 3.2 Type A 1 x USB 3.2 Type C
	OTG USB	1 x Micro USB (for system recovery only)
	CANBus	1 x DB9
	DI/DO	16 bit
	COM	4 x RS-232/RS-422/RS-485
	Audio	1 x Line-out
Expansion	M.2	1 x M.2 2230 (E Key)
	PCIe	1 x PCIe x16 (Optional, signal: PCIe x 8)
Storage	M.2 2280	1 x M.2 2280/3052 (B Key, signal: PCIe x2, USB3.0)
	SD	1 x SD 3.0 slot
Power	Power Supply voltage	9–36V
	Power Type	ATX/AT mode, ATX default
Environment	Operational Temperature	JA0 64G: -10 ~ 50 °C with 0.7 m/s air flow (non-throttling) JA0 32G: -10 ~ 60 °C with 0.7 m/s air flow (non-throttling)
	Operating Humidity	95% @ 40 °C (non-condensing)
	Vibration	3 Grms @ 5 ~ 500 Hz, random, 1 hr/axis
Mechanical	Dimensions (W x D x H)	200 x 220 x 74 mm
	Weight	-
	Mounting Support	Wall mounting
Operating System	Linux	Ubuntu 20.04 LTS with JetPack 5.0.1
Software Support	Software API	Edge AI Suite compatible
Certifications	EMC/Safety	CE/FCC Class B, CB, UL, CCC and BSMI (No RED Certificate)

Dimensions

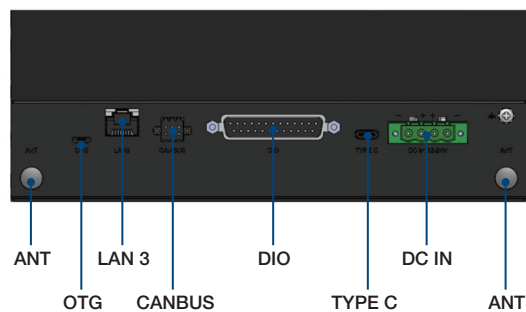
Unit: mm



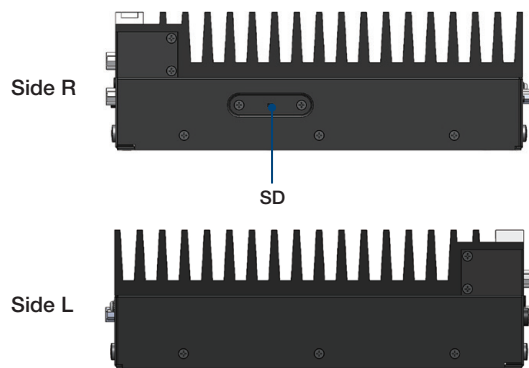
Front Panel I/O Mechanical Layout



Rear Panel I/O Mechanical Layout



Side Panel I/O Mechanical Layout



Ordering Information

Part No.	CPU	VPU	Memory	Storage	HDMI	GbE	USB	CANBus	RS-232/422/485	DIO	Power input	Operating Temperature
AIR-030-B90A1	Arm Cortex-A78AE	1792 NVIDIA® CUDA® cores and 56 Tensor cores	32GB	64GB eMMC 5.1	1	3	5	2	4	1	9 – 36 V _{DC}	-10 ~ 60 °C
AIR-030-S30A1	Arm Cortex-A78AE	2048 NVIDIA® CUDA® cores and 64 Tensor cores	64GB	64GB eMMC 5.1	1	3	5	2	4	1	9 – 36 V _{DC}	-10 ~ 50 °C

Packing List

Part Number	Description	Quantity
-	NVIDIA AI Inference System	1
-	Micro USB cable 40cm for system recovery	1
-	Simplified Chinese User Manuel	1
-	China RoHS	

Optional

Part Number	Description
96PSA-A230W24P4-3	AC to DC adapter, DC 24V 230W, -20 ~ 60 °C
1702002600	Power cable 3-pin 183cm, USA type
1702002605	Power cable 3-pin 183cm, EU type
1702031801	Power cable 3-pin 183cm, UK type
1700000237	Power cable, 3-Pin 183cm, PSE type