

AIR-030

AI Inference System Based on NVIDIA® Jetson AGX Orin™



Features

- Compact and high performance AI box up to 275 TOPS AI computing
- NVIDIA® Jetson AGX Orin™ 32G/64G built-in
- 9–36V wide power and -10–60 °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)
- Pre-load Ubuntu 20.04 image, JetPack 5.0 SDK
- IEC 61000-6-4 Heavy Industry Certificate
- AWS Greengrass Certified



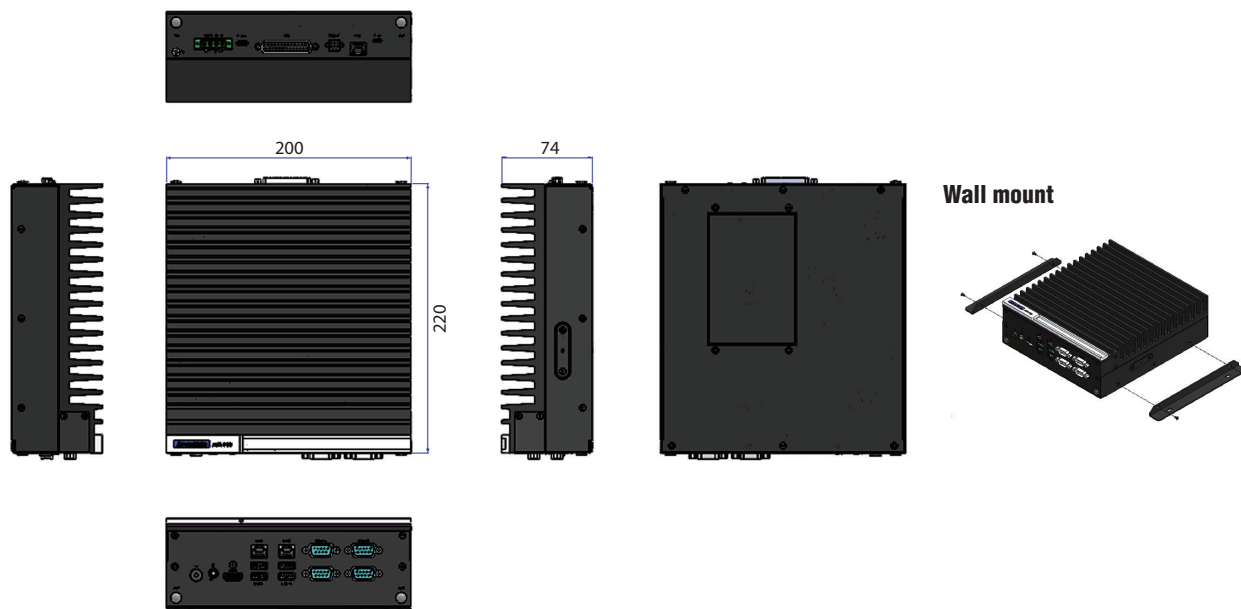
Specifications

Model		AIR-030-B90A1	AIR-030-S30A1
Processor System	NVIDIA Jetson Series	AGX Orin 32GB	AGX Orin 64GB
	CPU	8-core NVIDIA Arm® Cortex A78AE v8.2	12-core NVIDIA Arm® Cortex A78AE v8.2
	GPU	1792-core NVIDIA Ampere GPU with 56 Tensor Cores, Maximum Operating Frequency: 939 MHz	2048-core NVIDIA Ampere GPU with 64 Tensor Cores Maximum Operating Frequency: 1.3GHz
	AI Performance Reference	Up to 200 Sparse TOPs (INT8)	Up to 275 Sparse TOPs (INT8)
	TDP	15–30W	15–50W
	Memory	32GB 256-bit LPDDR5 DRAM	64GB 256-bit LPDDR5 DRAM
	Flash	64GB eMMC 5.1	
Ethernet	Interface	RJ-45	
	Controller	Intel® i225	
	Speed	3 x 2.5 Gigabit Ethernet (10/100/1000/2500 Mbps, LAN1&2 optional PoE support, LAN3 PCIe share with M.2 E key)	
Display	HDMI	1 x HDMI 2.0 (Max. resolution 3840 x 2160 @ 60Hz)	
IO Ports	USB	4 x USB 3.2 Type A 1 x USB 3.2 Type C 2 x internal USB 2.0 for dongle only	
	OTG USB	1 x Micro USB (for system recovery only)	
	CANBus	2	
	DI/DO	16 bit	
	COM	4 x RS-232/RS-422/RS-485	
	Audio	1 x Line-out	
	M.2	1 x M.2 2230 E Key (PCIe Gen3 x1 share with LAN3, M.2 E key and LAN3 can only be used exclusively.)	
Expansion	PCIe	1 x PCIe16 (Optional, signal: PCIe Gen3 x8)	
	MIPI	2 x internal 2-LANE MIPI-CSI connector	
Others	TPM	TPM2.0	
Storage	M.2 2280	1 x M.2 2280/3052 (B Key, signal: PCIe Gen3 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	With AGX Orin 32GB : -10 ~ 60°C with 0.7 m/s air flow With AGX Orin 64GB: -10~55°C with 0.7 m/s air flow (TDP MODE_50W)	
	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	3.63 kg	
	Mounting Support	Wall mounting	
Operating System	Linux	Ubuntu 22.04 LTS with JetPack6.2	
Software Support	Software API	Edge AI SDK compatible	
Certifications	EMC/Safety	CE/FCC Class B, CB, UL, CCC and BSMI (No RED Certificate)	

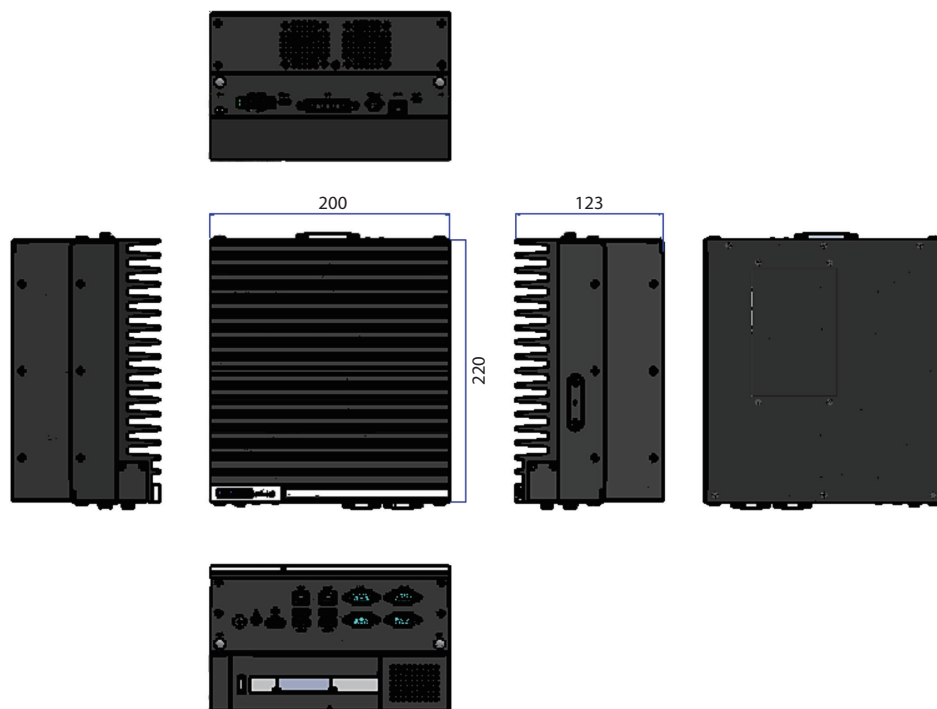
Dimensions

Unit: mm

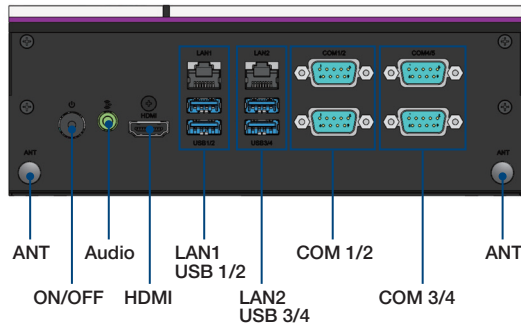
AIR-030 Single Layer



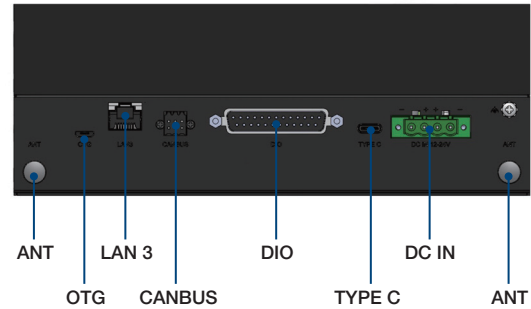
AIR-030 Dual Layer (Optional)



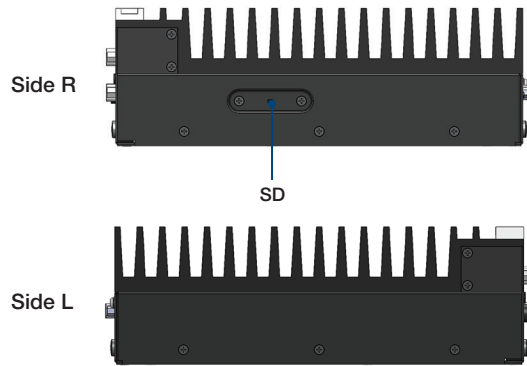
Front Panel I/O Mechanical Layout



Rear Panel I/O Mechanical Layout



Side Panel I/O Mechanical Layout



Ordering Information

Part No.	CPU	VPU	Memory	Storage	HDMI	2.5GbE	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	7	2	4	16 bit	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	7	2	4	16 bit	9 – 36 V _{DC}	-10 ~ 55 °C

Packing List

Part Number	Description	Quantity
-	NVIDIA AI Inference System	1
-	Micro USB cable 40cm for system recovery	1
-	Simplified Chinese User Manual	1
-	China RoHS	1
1960093556N011	Wall mount bracket	2
1652008233-01	Terminal Plug 6P for CANBus	1
1652003234	PLUG-IN BLOCK 4P for DC in	1
20706UJTNS0023	Image Ubuntu v1.0.0 AIR-030 w/JP6.2	1

Optional Item for Default SKU

Part Number	Description
96PSA-A150W19P4-4	AC to DC adapter, DC19V 150W, 0 ~ 40° C
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
1700019414	Debug cable, F Cable D-SUB 9P(M)/2x5P-2.0 30cm for FWA-5442
1700024248-01	Reflashing cable, M cable USB-A 4P(M)/micro USB-B 5P(M) 40cm
XAIR-SP512G3K5EVb	SP 512GB M.2 2242 Gen3x2 TLC -20~75
XAIR-SP010T3K5EVb	SP 1TB M.2 2242 Gen3x2 TLC -20~75

Optional Items for Expansion Kit

Part Number	Description
MIOE-PSE-DPA1	MIOE-PSE PoE Module
AMO-0301	AIR-030 1 x PCIe*16 Riser card and expansion kit
AMK-A0045	Thermal Kit for using PoE/5G on AIR-030

* For single layer, if LAN1 and LAN2 need PoE function, please order MIOE-PSE and AMK-A0045

* For dual layer to support PCIe16, please order AMO-0301 P/N.