

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



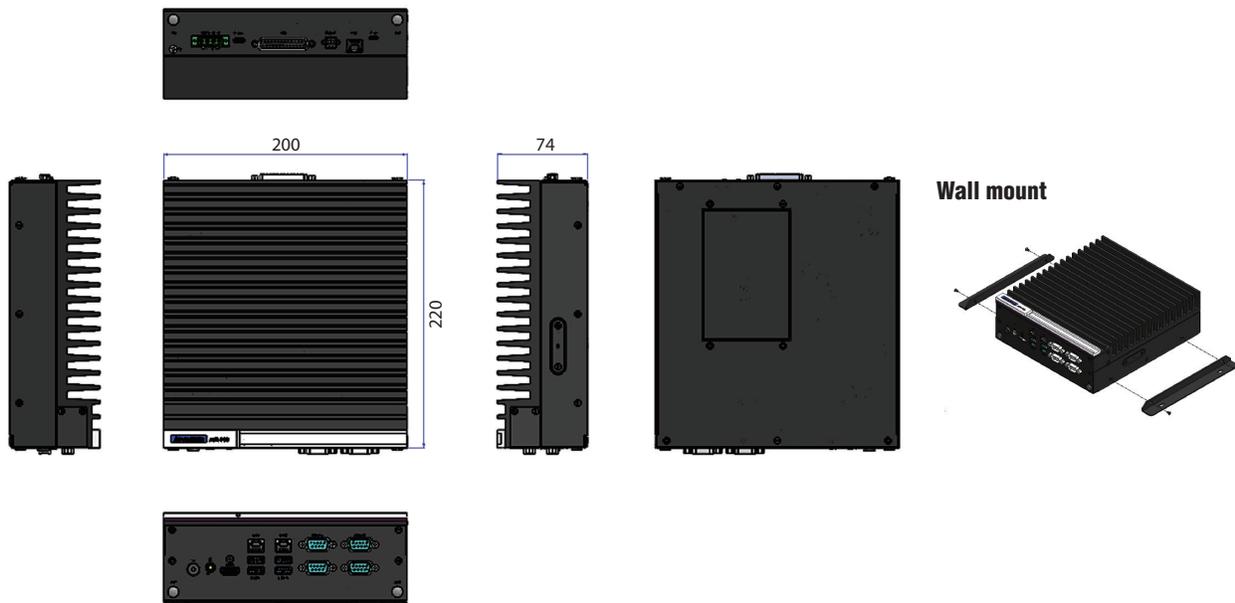
Specifications

| 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 | |
| | Expansion | M.2 | 1 x M.2 2230 E Key (PCIe share with LAN3, M.2 E key and LAN3 can only be used exclusively.) |
| PCIe | | 1 x PCIe x16 (Optional, signal: PCIe x 8) | |
| 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 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) | |

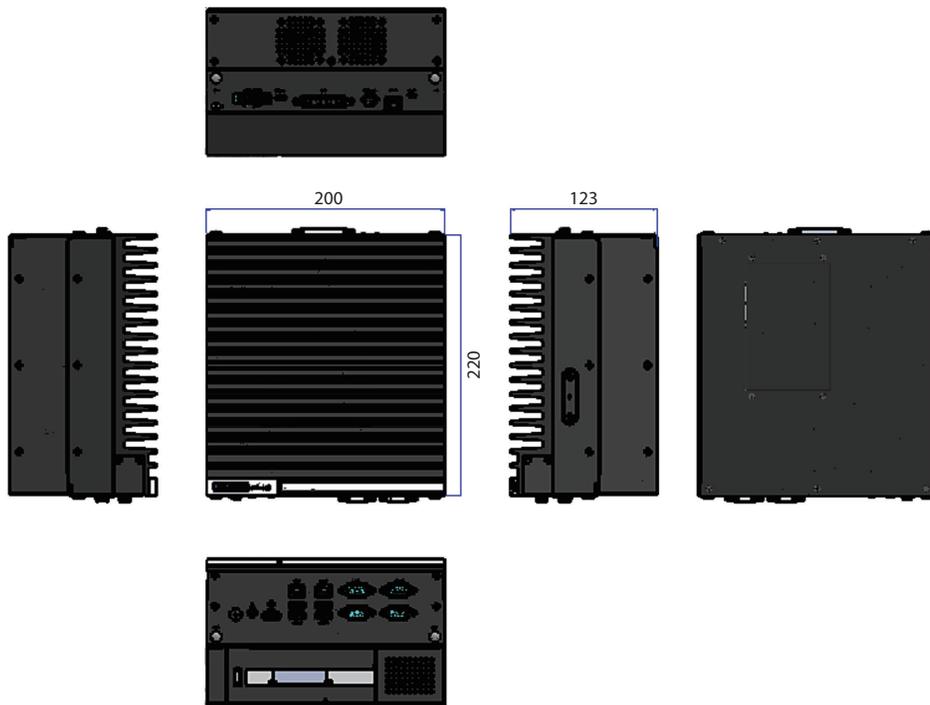
Dimensions

Unit: mm

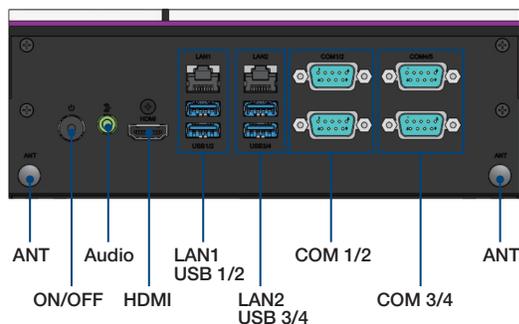
AIR-030 Single Layer



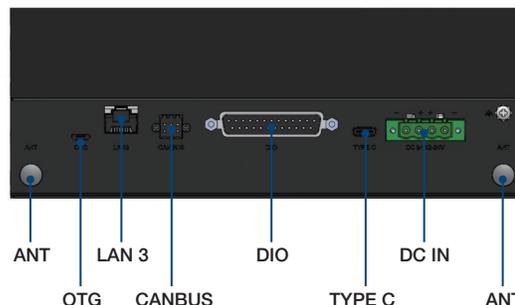
AIR-030 Dual Layer (Optional)



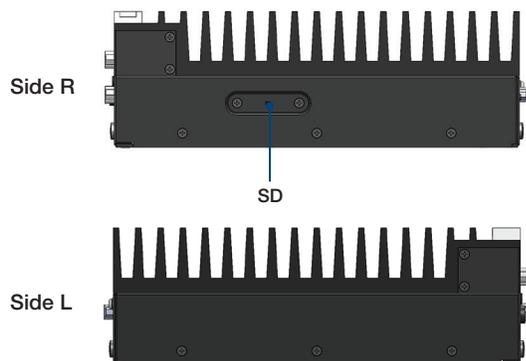
Front Panel I/O Mechanical Layout



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 |

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 |

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.

Inference Kit | Production-Ready AI Inference on Edge Devices

Provides a unified and hardware-aligned runtime for deploying and validating AI inference on edge devices

It simplifies integration across CPUs, GPUs, and AI accelerators while enabling performance benchmarking and compatibility verification on target hardware. Designed for production use, Inference Kit helps hardware partners ensure stable, scalable, and repeatable AI deployment across product lines.



EdgeAI SDK Inference Kit

Streamlined Edge Inference

- Ready-to-Run Inference Runtime
- Accelerator-Aware Optimization
- Stable Edge Production Stack
- Unified Inference Interfaces

Benefits and Features



Unified Inference Runtime

- Consistent inference across CPUs, GPUs, and accelerators
- Vendor-optimized runtime integration
- Built-in UniInfra acceleration framework
- Optimized inference pipelines and runtime efficiency



Hardware Validation

- Benchmarking on target devices
- OS and accelerator compatibility validation
- Performance and stability verification



Production-Ready Deployment

- Stable, long-running inference operation
- System monitoring and observability support
- Designed for scalable edge deployment



Global Customer Support

- System reliability certification
- Inference computing enablement
- Edge-to-cloud scalability collaboration

