

# AI Inference / DeviceEdge

# Jetson System AIE-CO21/AIE-CO31 AIE-CN31/AIE-CN41



## Features

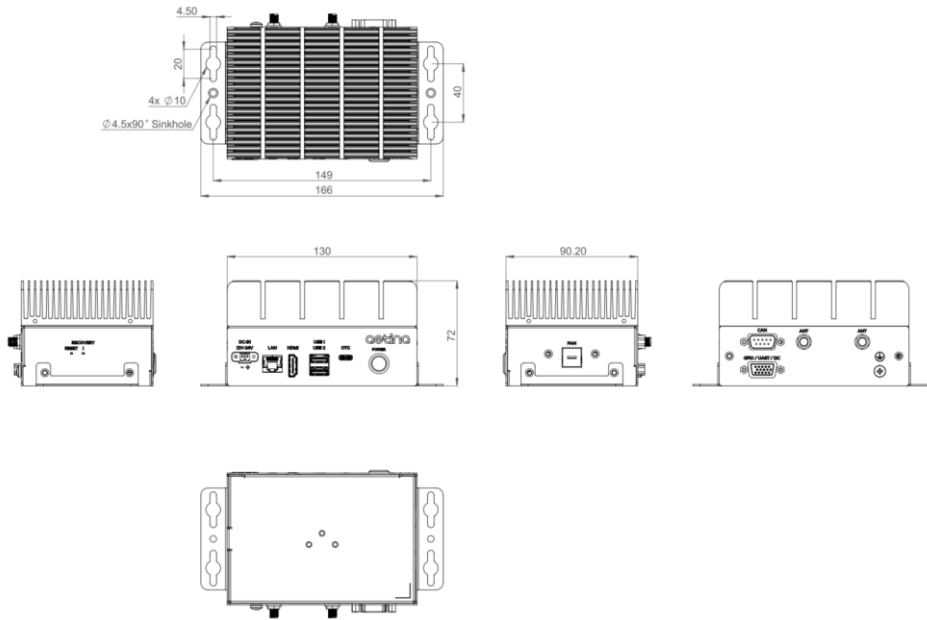
- Supports NVIDIA Jetson Orin Nano/NX Series
- 1 x M.2 E-Key/M-Key (128GB built-in)
- 1 x RJ-45 GbE Port
- Wide Power Input Range 12 to 24 VDC
- Operating temperature -25°C ~ +55°C
- Fanless Design



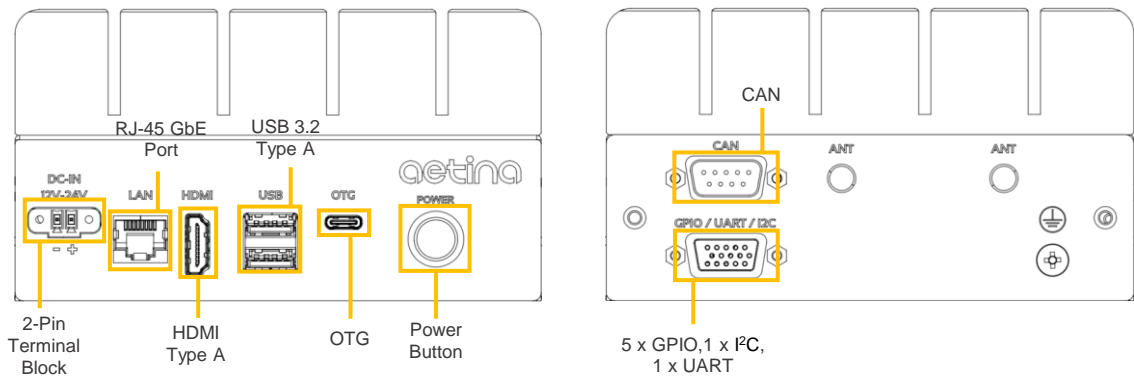
## Specifications

Model Number	AIE-CO21 / AIE-CO31	AIE-CN31 / AIE-CN41
Module Compatibility	NVIDIA Jetson Orin Nano 4/8G	NVIDIA Jetson Orin NX 8/16G
AI Performance	20/40 TOPS	70/100 TOPS
GPU	512 Core NVIDIA Ampere, with 16 Tensor Cores 1024 Core NVIDIA Ampere, with 32 Tensor Cores	1024 Core NVIDIA Ampere, with 32 Tensor Cores
CPU	6-core Arm® Cortex®-A78AE v8.2 64-bit 1.5MB L2 + 4MB L3	6-core Arm® Cortex®-A78AE v8.2 64-bit 1.5MB L2 + 4MB L3 8-core Arm® Cortex®-A78AE v8.2 64-bit 2MB L2 + 4MB L3
Memory	4GB 64-bit LPDDR5 34 GB/s 8GB 128-bit LPDDR5 68 GB/s	8GB 128-bit LPDDR5 102.4 GB/s 16GB 128-bit LPDDR5 102.4 GB/s
Storage	1 x M.2 M-Key 2242 (128GB built-in)	
Display	1 x HDMI 2.0 Type A	
RTC	With super capacitor, battery (optional)	
LAN	1 x RJ-45 GbE Port	
USB	2 x USB 3.2 Gen2 Type A 1 x OTG Type-C	
I/O Interfaces	5 x GPIO, 1 x UART, 1 x I2C, 1 x CAN (Isolation)	
Expansion	1 x M.2 E-Key 2230 (WiFi/BT, PCIe/USB 2.0) 1 x NVMe M.2 M-Key 2242 (128GB built-in)	1 x M.2 E-Key 2230 (WiFi/BT, PCIe/USB 2.0) 1 x NVMe M.2 M-Key 2242 (128GB built-in)
MISC. Function	1 x Power Button, 1 x Recovery Button, 1 x Reset Button 1 x CAN 2.0b with isolation	
Power Input /Connector	DC-in 12-24 VDC / 2-Pin Terminal Block	
Power consumption	Idle: 3.4 W Full Loading: 25.08* W	Idle: 3.7 W Full Loading: 35.5* W
	*For more test condition information, please refer to user manual	
Dimension (W x D x H)	130 x 90.2 x 72 mm (5.11 x 3.55 x 2.83 in)	
Mounting	Wall Mount / Din Rail (optional)	
Net Weight	0.927 kg (2.044 lb)	
Vibration	1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis	
Shock	10 G, IEC 60068-2-27, half sine, 11 ms duration	
Temperature	Operating Temp.: -25°C ~ +55°C (-13°F ~ +131°F) Storage Temp.: -40°C ~ +85°C (-40°F ~ +185°F)	
Humidity	95% @ 40°C (104°F) (non-condensing)	
OS Support	Ubuntu 20.04	
Certification	CE / FCC Class A / UKCA	

## System & Mounting Dimensions



## I/O Mechanical Layout



## Ordering Information

Model name	Description
AIE-CO21-1-A1	Orin Nano 4GB, 1 x HDMI, 1 x GbE, 2 x USB, 128GB SSD, E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-CO31-1-A1	Orin Nano 8GB, 1 x HDMI, 1 x GbE, 2 x USB, 128GB SSD, E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-CN31-1-A1	Orin NX 8GB, 1 x HDMI, 1 x GbE, 2 x USB, 128GB SSD, E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-CN41-1-A1	Orin NX 16GB, 1 x HDMI, 1 x GbE, 2 x USB, 128GB SSD, E/M Key, 12 to 24 VDC input, -25°C ~ +55°C

## Packing List

Item/Part Number	Description
AIE-CO21	AIE-CO21 system w/ Orin Nano 4GB
AIE-CO31	AIE-CO31 system w/ Orin Nano 8GB
AIE-CN31	AIE-CN31 system w/ Orin NX 8GB
AIE-CN41	AIE-CN41 system w/ Orin NX 16GB
53-0F0000-0002	100-240V 60W 12V 5A power adaptor

## Accessories (Optional)

Part Number	Description
32-010000-0005	US power cord
32-010000-0006	EU power cord
32-010000-0008	JP power cord
3102000037N000	UK power cord

## Peripheral (Optional)

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