

# AI Inference / DeviceEdge

## Jetson System AIE-KX13/AIE-KX23

### Features

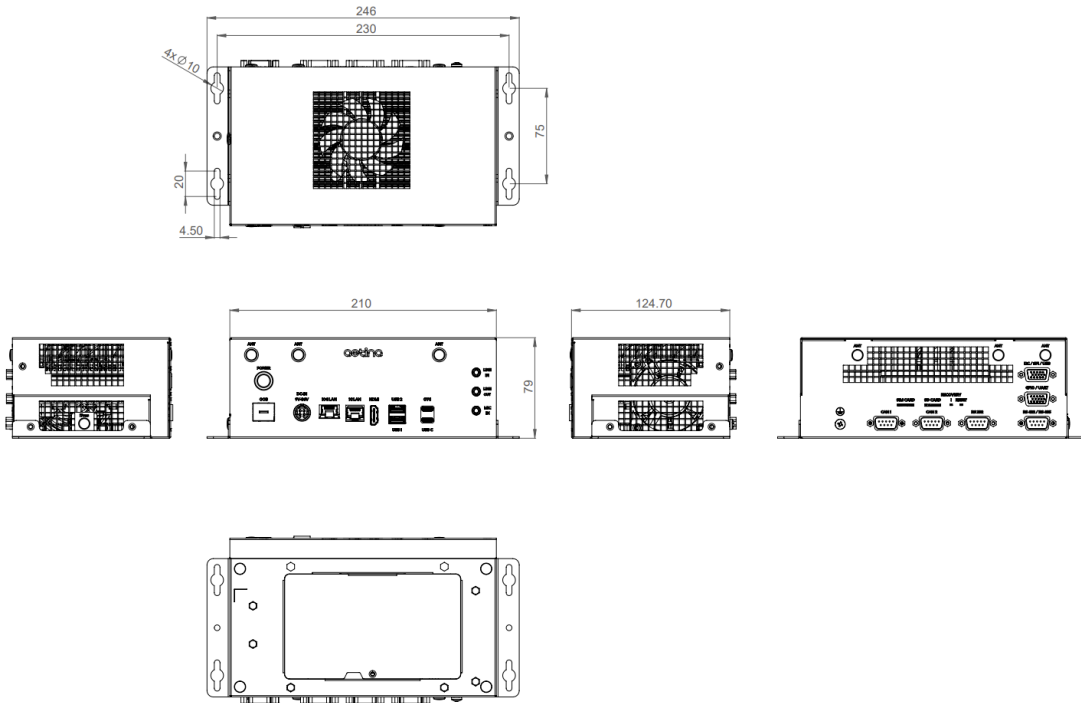
- Supports NVIDIA Jetson AGX Orin™ 32GB/64GB
- 1 x GbE/1 x 10GbE LAN port
- 1 x B-Key/1 x E-Key/1 x M-Key slot
- Wide Input Voltage Range 9 to 36VDC
- Operating Temperature -25°C ~ +70°C
- Supports OOB (out-of-band) powered by Innodisk (optional)



### Specifications

| Model Number           | AIE-KX13   | AIE-KX23  |
|------------------------|--|---|
| Module Compatibility   | NVIDIA Jetson AGX Orin 32GB  | NVIDIA Jetson AGX Orin 64GB                                   |
| AI Performance         | 200 TOPS   | 275 TOPS  |
| GPU                    | 1792-core NVIDIA Ampere GPU with 56 Tensor Cores   | 2048-core NVIDIA Ampere GPU with 64 Tensor Cores              |
| CPU                    | 8-core Arm® Cortex®-A78AE<br>v8.2 64-bit CPU 2MB L2 + 4MB L3   | 12-core Arm® Cortex®-A78AE<br>v8.2 64-bit CPU 3MB L2 + 6MB L3 |
| Memory                 | 32 GB 256-bit LPDDR5 204.8 GB/s  | 64GB 256-bit LPDDR5 204.8 GB/s                                |
| Storage                | 64GB eMMC 5.1  |   |
| Display                | 1 x HDMI 2.0 Type A  |   |
| Audio                  | Line-out/Line-in/Mic (optional with daughter board)  |   |
| LAN                    | 1 x RJ-45 GbE port, 1 x RJ-45 10GbE port   |   |
| USB                    | 2 x USB 3.2 Gen1 Type A, 1 x USB 2.0 (DB-15), 1 x OTG Type-C, 1 x USB 3.2 Type-C Gen 2   |   |
| I/O Interfaces         | 2 x I <sup>2</sup> C, 1 x SPI, 5 x GPIO<br>1 x RS-232, 1 x RS-422 / RS-485<br>2 x CAN 2.0b w/ isolation<br>1 x microSIM Card Slot  |   |
| Expansion              | 1 x M.2 B-Key 3042/3052 (LTE/4G/5G, USB 3.2/USB 2.0)<br>1 x M.2 E-Key 2230 (Wifi/BT, PCIe/USB 2.0)<br>1 x M.2 M-Key 2280 (support NVMe, PCIe x2 Gen4)<br>1 x MicroSD Card Slot |   |
| MISC. Function         | 1 x Power / Recovery / Reset Button<br>2 x UART, 1 x UART (Debug only)   |   |
| Power Input /Connector | DC-IN 9 to 36 VDC / 4-Pin DC Jack Power Connector  |   |
| Power Consumption      | Idle: 9.655 W<br>Full Loading: 55.25 W   | Idle: 9.9 W<br>Full Loading: 75.25 W                          |
|                        | *For more test condition information, please refer to user manual  |   |
| Dimension (W x Dx H)   | 210 x 124.7 x 79 mm (8.3 x 4.91 x 3.11 in)   |   |
| Mounting               | Wall Mount / Din Rail (Optional)   |   |
| Net Weight             | 1.969 kg (4.34 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 Temperature: -25°C ~ +70°C (-13° F ~+158° F)<br>Storage Temperature: -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   |   |

## System & Mounting Dimensions



## I/O Mechanical Layout



## Ordering Information

| Model name    | Description   |
|---------------|---|
| AIE-KX13-1-A1 | AGX Orin 32GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 3 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +70°C |
| AIE-KX23-1-A1 | AGX Orin 64GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 3 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +70°C |

## Packing List

| Item/Part Number | Description                          |
|------------------|--------------------------------------|
| 92-CEKX13-J000   | AIE-KX13 system w/ AGX Orin 32GB     |
| 92-CEKX23-J000   | AIE-KX23 system w/ AGX Orin 64GB     |
| 53-0FG160-1200   | 85~264V 138W 12V 11.5A 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 |

## Peripheral (Optional)

[Download the List](#)

