# X6a-AGX

**NVIDIA® Jetson Orin**
Edge AI Compact Fanless Embedded System

## KEY FEATURES

### Nvidia Edge AI engine
NVIDIA® Jetson Orin AGX™ module
(max. 275 TOPs)

### Rich I/O
1 10GLAN, 1G LAN, 2 USB 3.2 Gen1,
1 USB type B, 1 HDMI, 1 MicroSD, 1 CAN bus

### Wide Temperature
Ruggedized fanless design with -20 ~ 60°C
operating temperature

### Optional Wireless Expansions
WiFi 6E, 4G/5G
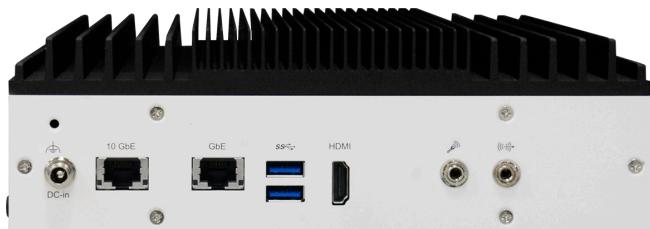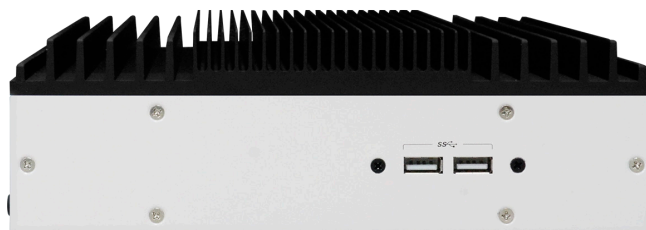
### Optional Video Capture
1 x SDI, 1 x HDMI

### OOB Support
Optional OOB (out-of-band) support

FC · CE · RoHS · NVIDIA.

## PANEL



**Back View**



**Front View**



**Side View**

## SPECIFICATION

| | | |
|---|---|---|
| **SYSTEM** | **SOM** | NVIDIA® Jetson Orin AGX™ Industrial<br>NVIDIA® Jetson Orin AGX™ 64GB<br>NVIDIA® Jetson Orin AGX™ 32GB |
| | **Processor** | 8/12-core Arm® Cortex®-A78AE v8.2 64-bit CPU |
| | **GPU** | 2048-core NVIDIA Ampere architecture GPU with 64 Tensor Cores<br>1792-core NVIDIA Ampere c GPU with 56 Tensor Cores |
| | **Memory** | 64/32GB 256-bit LPDDR5 |
| **WATCHDOG TIMER** | **Output & Interval** | Built-in NVIDIA® Jetson Orin™ |
| **GRAPHICS** | **Display** | HDMI |
| **STORAGE** | **Internal** | M.2 2242/2280 M key (NVMe)<br>micro-SD card slot |
| **EXPANSION** | **Onboard** | 1 x M.2 Key E 2230 slot (USB 2 +PCIex1 signal) for Wi-Fi 6E<br>1 x M.2 Key B 3042/3052 slot (USB3 signal) for 5G/LTE with Nano SIM |
| **ETHERNET** | **Controller** | 1x GbE RJ-45<br>1x 10G RJ-45 |
| **LED** | **Indicators** | 1 x Power |
| **FRONT I/O** | **Ethernet** | 1 x RJ45 GbE connector<br>1 x RJ45 10G ethernet connector |
| | **USB** | 2 x USB 3.2 Gen1 |
| | **Display** | 1 x HDMI |
| | **DC in** | 1 x 2-pin power terminal block |
| **SIDE I/O** | **USB** | USB type B for OTG recovery |
| | **Buttons** | 1 x Power, 1 x recovery |
| | **SD** | 1 x MicroSD |
| | **CAN bus** | 3-pin terminal block with transceiver |
| **Antenna** | **Antenna** | 6 x antenna holes |
| **POWER** | **Type** | 12~54V DC |
| | **Connector** | 1x DC Jack with lock |
| | **RTC Battery** | Yes |
| **OS SUPPORT** | **Linux** | Jetpack 6.2 |
| **MECHANISM** | **Mounting** | Wall mount (mounting brackets and screws) |
| | **Dimensions (W x H x D)** | Approx. 221mm x L: 200mm x H: 75mm |
| | **Weight** | 4.2kg |
| **ENVIRONMENT** | **Operating Temperature** | -20°C to 60°C |
| | **Storage Temperature** | -40°C to 85°C |
| | **Relative Humidity** | 5 to 95% RH (non-condensing) |
| **STANDARDS AND CERTIFICATIONS** | **Shock** | **Operation:**<br>IEC 60068-2-27 Test Ea: Shock test<br>Half-sine, 3G @ 11ms, 18 Shock ±X, ±Y, ±Z (each axis 3 times)<br>**Non- Operation:**<br>IEC 60068-2-27 Test Ea: Shock test<br>Half-sine, 5G @ 11ms, 18 Shock ±X, ±Y, ±Z (each axis 3 times) |
| | **Vibration** | **Operation:**<br>IEC 60068-2-64 Test Fh: Vibration board-band random test<br>Random,2Grms @ 5~500 Hz, 30min.<br>**Non- Operation:**<br>IEC 60068-2-6 Test Fc: Vibration Sinusoidal Test<br>Sweep sine, 3Grms @ 10~500Hz, 30min. |
| | **Certifciation** | CE, FCC Class A, RoHS |