

AEC-6X00 Series

NVIDIA® Jetson AGX Orin™ AI Embedded Computer



Features

- Supports NVIDIA® Jetson AGX Orin™
- Support 2 x GbE + 4 x IEEE 802.3at GbE PoE+ ports (AEC-6200-32)
- Support 8 GMSL cameras (AEC-6100-32)
- 2 x RS-232/422/485, 5 x USB, 16 isolated DI/O, 2 x isolated CAN Bus
- HDMI 2.1, up to 8K@60 Hz
- DC 9~48V wide range power input & Ignition power control
- Operating Temperature -25°C ~ +70°C (TDP: 30W)

| | |
|--------------------|--|
| Operating Humidity | 5 ~ 95% (non-condensing) |
| Relative Humidity | 95% @ 70°C |
| Shock | Operating, MIL-STD-810G, Method 516.7, Procedure I |
| Vibration | Operating, MIL-STD-810G, Method 514.6, Procedure I, Category 4 |
| EMC | CE,FCC, EN50155(TBA), EN50121-3-2 (TBA) |

Power Requirement

| | |
|------------------|---|
| Power Input | DC 9V ~ 48V |
| Power Interface | 3-pin Terminal Block : V+, V-, Frame Ground |
| Ignition Control | 16-mode Software Ignition Control |
| Power Ignition | 3-pin Terminal Block |

Mechanical

| | |
|------------------------|---|
| LED | Power, SSD, 2 User Programmable |
| Button | 1 x Power Button, 1 x Force Recovery Button, 1 x Reset Button |
| Antenna | 6 Antenna hole for WiFi/4G/5G/LTE/GPRS/UMTS |
| Mounting | Wallmount by mounting bracket, DIN Rail and VESA Mount (Optional) |
| Weight | 3.8 Kg |
| Dimensions (W x D x H) | 260 mm x 182 mm x 69 mm |

OS Support

Linux / NVIDIA JetPack SDK

Ordering Information

| | |
|-------------|---|
| AEC-6100-32 | Jetson AGX Orin 32GB, 2 x LAN, 8 x GMSL, 2 x serial, 16 x DIO(8 x DI, 8 x DO), 2 x CANbus |
| AEC-6200-32 | Jetson AGX Orin 32GB, 2 x LAN, 4 x PoE+, 2 x serial, 16 x DIO(8 x DI, 8 x DO), 2 x CANbus |



Embedded Computing

| System | |
|-----------------|--|
| CPU | 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU |
| Memory | 32GB LPDDR5 DRAM |
| GPU | 1792-core NVIDIA Ampere™ architecture GPU with 56 Tensor Cores |
| DL Accelerator | 2x NVDLA Engines |
| Storage | 2 x M.2 Key M Socket (2280, PCIe x4) 1 x eMMC 5.1, 64GB 1 x Micro SD (External) |
| LAN Chipset | 2 x 10/100/1000 Base-T Ethernet GigE LAN, RJ45 Connector 4 x IEEE 802.3at (25.5W/48V) GigE PoE+ LAN, RJ45 Connector (AEC-6200-32) |
| I/O | |
| Serial Port | 2 x RS-232/422/485 ports |
| CAN Bus | 2 x Isolated CAN Bus support CAN FD |
| USB Port | 1 x USB 3.2 Gen 2, 4 x USB 3.1(5Gbps) |
| Micro USB | 1 x Micro USB console debug port, 1 x Micro USB OS flash port |
| DIO | 16 Isolated DIO (8 DI, 8 DO) |
| LAN | 2 x 10/100/1000 Base-T Ethernet GigE LAN |
| PoE | 4 x IEEE 802.3at (25.5W/48V) GigE PoE+ LAN, RJ45 Connector (AEC-6200-32) |
| SIM | 2 x SIM Card Socket |
| Expansion | 1 x PCIe Gen4 x8 Slot, 1 x M.2 Key B Socket (3042/3052, USB3), M.2 Key E Socket (2230, PCIe/USB) |
| Video Port | 1 x HDMI 2.1, up to 8K 60Hz |
| Video Encode | 1x 4K @60, 3x 4K @30, 6x 1080p @60, 12x 1080p @30 (HEVC) |
| Video Decode | 1x 8K @30, 2x 4K @60, 4x 4K @30, 9x 1080p @60, 18x 1080p @30 (HEVC) |
| GMSL | 8 Fakra-Z connectors for GMSL 1/2 automotive cameras (AEC-6100-32) |
| Environmental | |
| Operating Temp. | -25 ~ 70°C (-13 ~ 158°F) (TDP: 30W), -25 ~ 55°C (-13 ~ 131°F) (TDP: 40/50W) |
| Storage Temp. | -40 ~ 85°C (-40 ~ 185°F) |

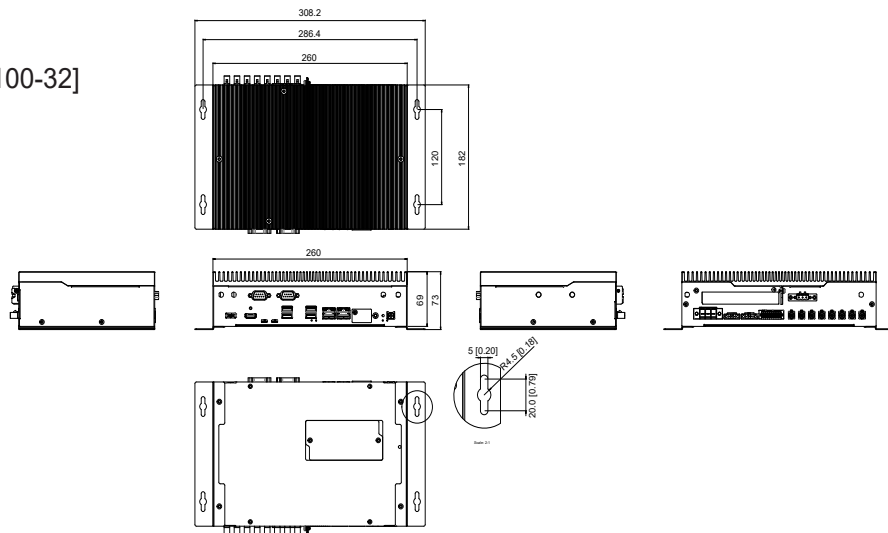
All specifications are subject to change without notice.



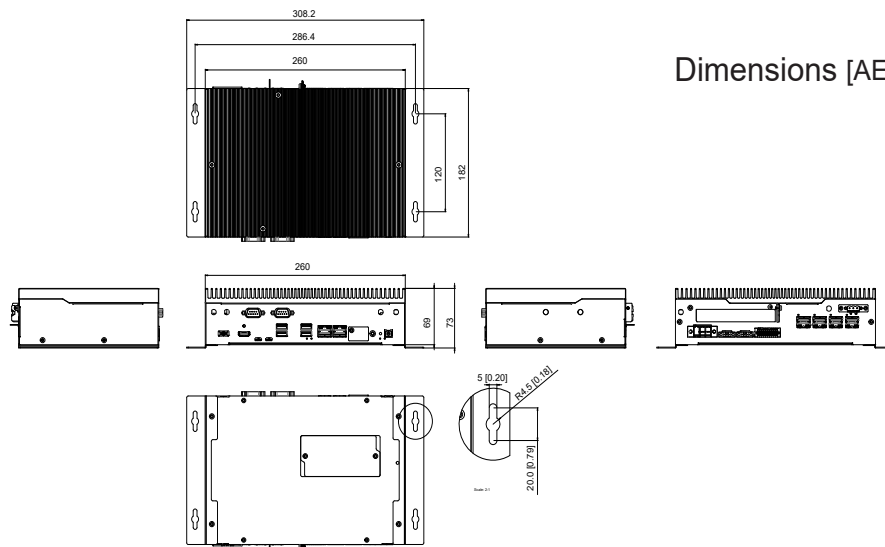
Optional Accessories

| | |
|-----------------------|---|
| 160W AC-DC WT Adaptor | 160W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C |
| 180W AC-DC Adaptor | 180W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block |
| 280W AC-DC WT Adaptor | 280W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C |
| VESA Mount | VESA Mounting Kit |
| DIN-RAIL | DIN Rail and VESA Mounting Kit |
| GMSL Camera Kit | GMSL Camera with Fakra-Z connector |
| M.2 Storage Module | M.2 Key M/Key B PCIe Storage Module |
| 5G Module | 5G Module with Antenna |
| 4G Module | 4G/GPS Module with Antenna |
| WiFi & Bluetooth | WiFi & Bluetooth Module with Antenna |

Dimensions [AEC-6100-32]



Dimensions [AEC-6200-32]



Assured Systems

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