



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)

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)

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

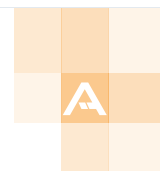
OS Support

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

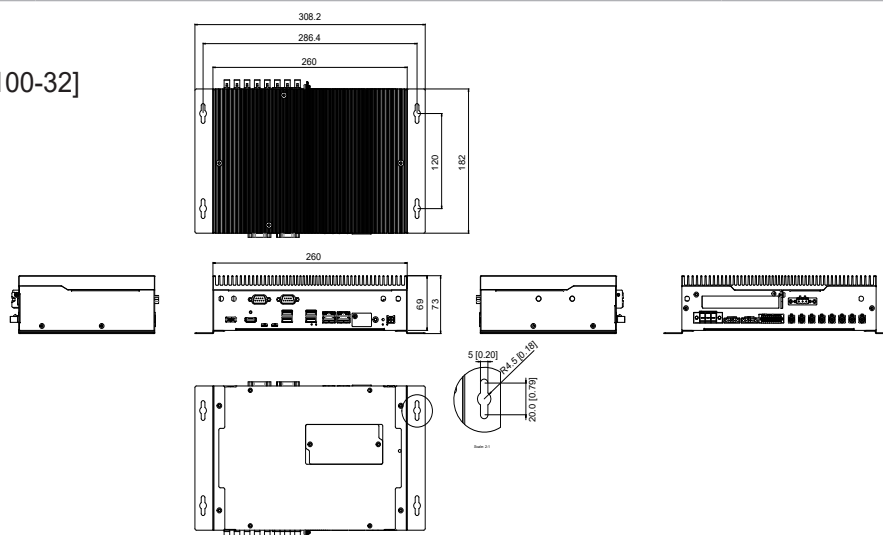




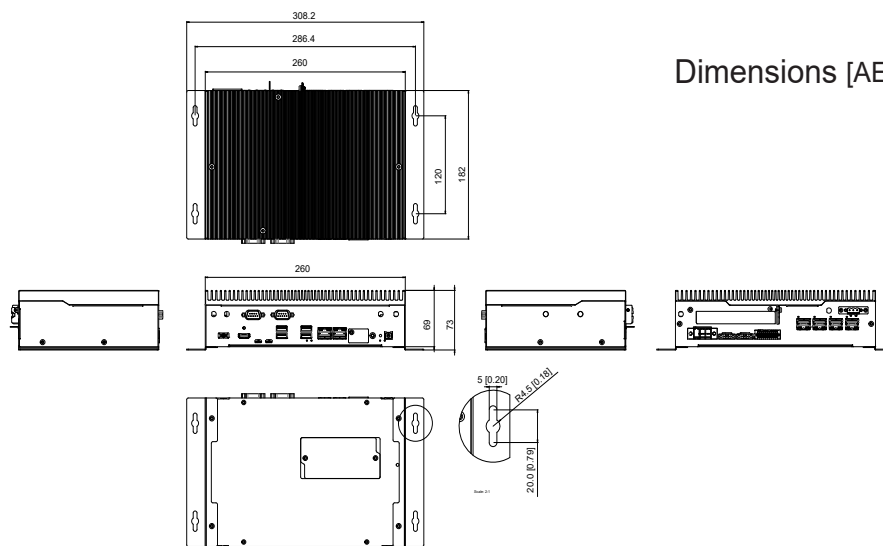
Optional Accessories

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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