

# ECX700-AL

Intel Atom® Processor E3900 Series  
Ruggedized Fanless Embedded System



## KEY FEATURES



### Ultra Rugged Design

IPC67, comply with Military criteria of vibration and shock test



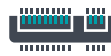
### Wide Temperature

Operating temperature: -40° to 70° C



### Wide Voltage

Power range: 9~36V



### eMMC

4GB DDR3 onboard, 64G eMMC



### Wireless

Optional WiFi, LTE, CanBus

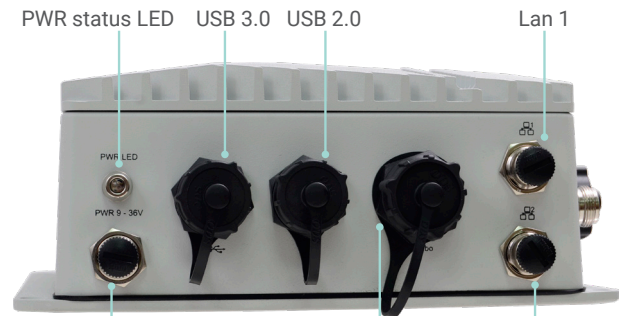


## PANEL



LTE 1 SmartVent LTE 2

**Top View**



PWR status LED USB 3.0 USB 2.0 Lan 1  
PWR LED PWR 9~36V Combo (COM 1/2, CAN 1/2) Lan 2

**Bottom View**



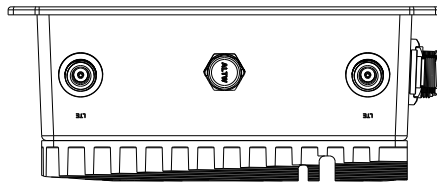
HDMI or VGA WiFi 1  
WiFi 1 External SIM slot

**Right View**

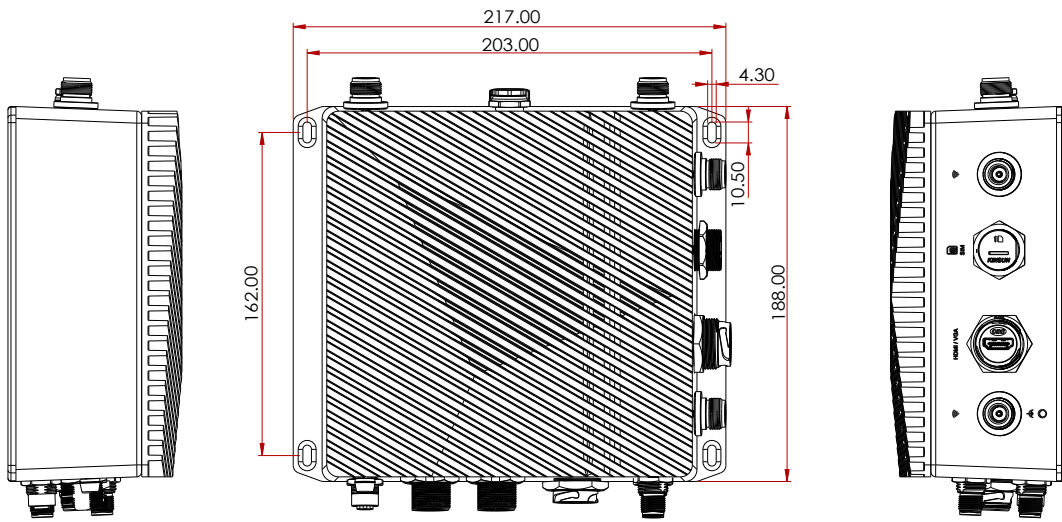


**Stand View**

# DIMENSIONS

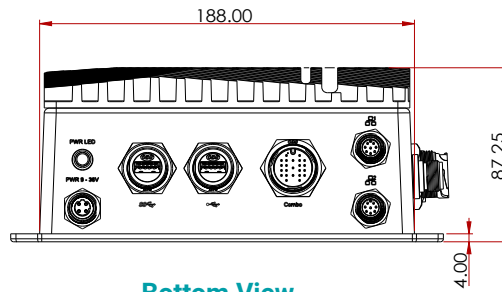


Sky View



Left View

Right View



Bottom View

## SPECIFICATION

SYSTEM	Processor	Intel Atom® Processor E3900 Series, BGA 1296 Intel Atom® x7-E3950 Processor, Quad Core, 2M Cache, 1.6GHz (2.0GHz), 12W Intel Atom® x5-E3940 Processor, Quad Core, 2M Cache, 1.6GHz (1.8GHz), 9.5W Intel Atom® x5-E3930 Processor, Dual Core, 2M Cache, 1.3GHz (1.8GHz), 6W	
	Memory	2GB/4GB/8GB memory onboard	
	BIOS	AMI SPI 128Mbit (supports UEFI/Legacy mode and Security Boot (optional))	
GRAPHICS	Controller	Intel® HD Graphics	
	Feature	OpenGL 4.2, Direct X 11.1, OpenCL 1.2, OGL ES 3.0 HW Decode: H.264, MPEG2, VC1, VP8, H.265, MPEG4, MVC, VP9, WMV9, JPEG/MJPEG HW Encode: H.264, MPEG4, VP8, H.265, MVC	
	Display	1 x HDMI or VGA	VGA: resolution up to 1920 x 1200@60Hz HDMI: resolution up to 3840x2160@30Hz
STORAGE	EMMC	Support EMMC up to 8G/16GB/32GB/64GB (optional)	
EXPANSION	Interface	1 x Full-size Mini PCIe for 4G LTE module 1 x Full-size Mini PCIe for Canbus 1 x M.2 2230 (USB2.0/PCIe) for WiFi module	
ETHERNET	Controller	2 x Intel® I210AT PCIe (10/100/1000Mbps)	
LED	Indicators	1 x Power Status LED	
BOTTOM I/O	USB	2 x USB 3.0	
	LAN	2 x GbE	
	Combo	2 x RS232 and 2 x Can bus protocol	
	Power	1 x 9~36V DC-IN	
TOP I/O	Antenna Hole	2 x Antenna (LTE)	
	Vent	1 x Vent	
FRONT I/O	Display	1 x HDMI or 1 x VGA (optional)	
	SIM slot	1 x SIM card slot	
	Antenna Hole	2 x Antenna (WiFi)	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
SECURITY	TPM	TPM 1.2/ 2.0	
POWER	Type	DC-in 9~36V	
	Connector	M12 D-code	
OS SUPPORT	Microsoft	Windows 10 IoT Enterprise 64-bit	
	Linux	Linux	
MECHANISM	Mounting	Wall Mount	
	Dimensions (W x H x D)	217 x 188 x 87 mm ( with wall-mount bracket)	
	Weight	2.1 kg	
ENVIRONMENT	Operating Temperature	-40 to 70°C (E3950,E3940, E3930 only)	
	Storage Temperature	-40 to 85°C	
	Relative Humidity	5 to 95% RH (non-condensing)	
STANDARDS AND CERTIFICATIONS	Construction	IP67 enclosure	
	Shock	Operation shock test: Half Sine Wave 15G, 11ms, 3 Shock Per Axis	
	Vibration	Operation Vibration test: MIL-STD-810G 514.6C-2, Figure 514.6C-2	
	Certifications	CE, FCC class A	

## ORDERING INFORMATION

Model Name	Part Number	Description
ECX700-AL	TBD	ECX700-AL-B00: E3950, 4G memory down, 64G emmc, LED, PWR, 1 USB 3.0, 1 USB 2.0, 2 LAN
ECX700-AL	TBD	ECX700-AL-BW0: E3950, 4G memory down, 64G emmc, LED, PWR, 1 USB 3.0, 1 USB 2.0, 2 LAN, WiFi
ECX700-AL	TBD	ECX700-AL-PC0: E3950, 4G memory down, 64G emmc, LED, PWR, 1 USB 3.0, 1 USB 2.0, 2 LAN, 1 HDMI or VGA, 2 COM
ECX700-AL	TBD	ECX700-AL-PC1: E3950, 4G memory down, 64G emmc, LED, PWR, 1 USB 3.0, 1 USB 2.0, 2 LAN, 1 HDMI or VGA, 2 COM + 2 CAN
ECX700-AL	TBD	ECX700-AL-PC2: E3950, 4G memory down, 64G emmc, LED, PWR, 1 USB 3.0, 1 USB 2.0, 2 LAN, 1 HDMI or VGA, 2 COM + 2 CAN, WiFi
ECX700-AL	TBD	ECX700-AL-PC3: E3950, 4G memory down, 64G emmc, LED, PWR, 1 USB 3.0, 1 USB 2.0, 1 HDMI or VGA, 2 COM + 2 CAN, WiFi, LTE
ECX700-AL	TBD	ECX700-AL-PC4: E3950, 4G memory down, 64G eMMC, LED, PWR, 1 USB 3.0, 1 USB 2.0, 2 LAN, 1 HDMI or VGA, 2 COM + 2 Can, WiFi, LTE
ECX700-AL	TBD	ECX700-AL-I00: E3950, 4G memory down, 64G emmc, LED, PWR, 1 USB 3.0, 1 USB 2.0, WiFi, LTE