

# ECX700-AL

Intel Atom® Processor E3900 Series  
Ruggedized Fanless Embedded System



## KEY FEATURES



### Ultra Rugged Design

IP67/ IP69K, comply with military criteria of vibration and shock test



### Wide Temperature

Operating temperature: -40° to 70° C



### Wide Voltage

Power range: 9~36V



### On Board RAM/Storage

RAM: 4GB DDR3L Memory (Default)  
Storage: 32GB/64GB eMMC (Default)



### Wireless

Optional WiFi, LTE

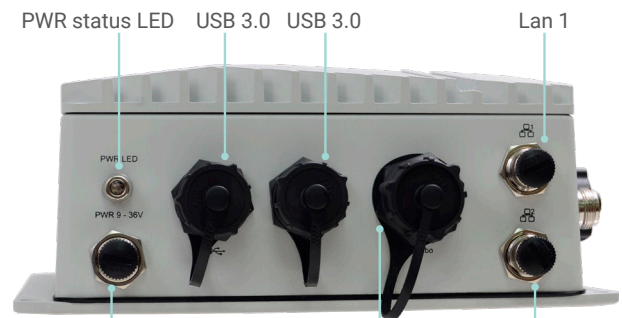


## PANEL



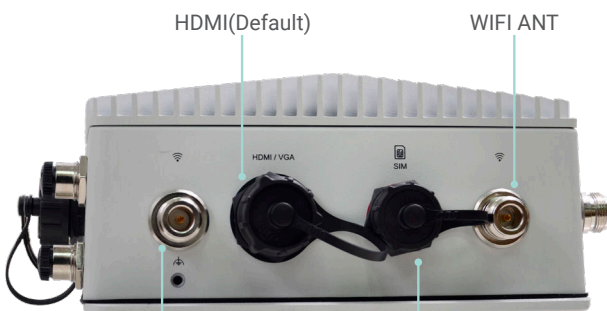
LTE ANT SmartVent LTE ANT

Top View



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

Bottom View



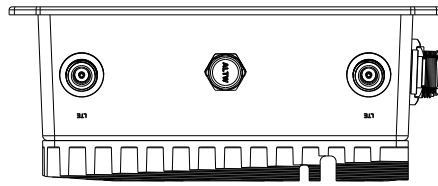
HDMI(Default) WIFI ANT WIFI ANT External SIM slot

Right View

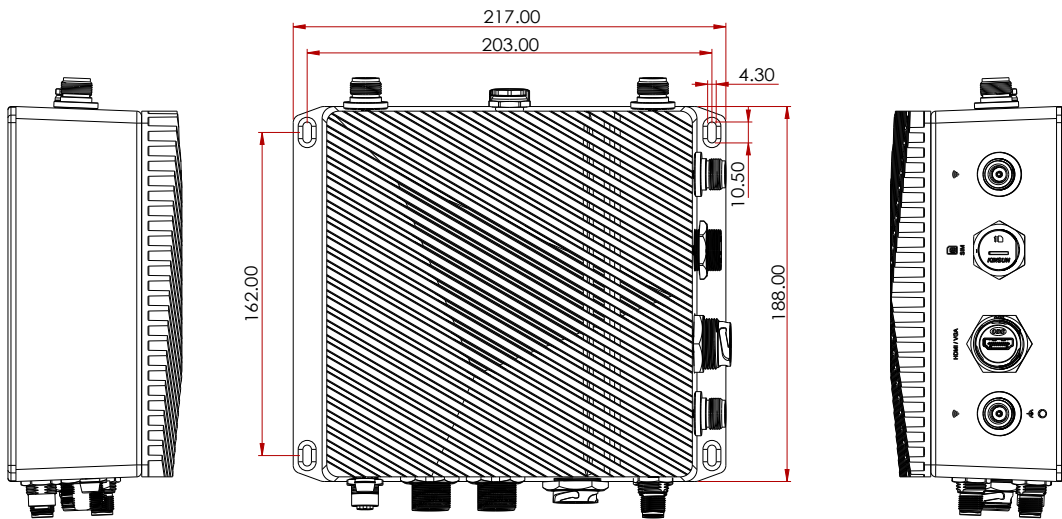


Stand View

# DIMENSIONS

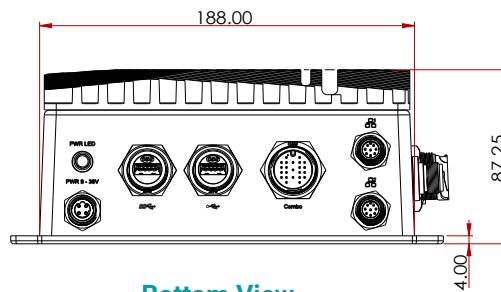


Top View



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	4GB memory onboard (2GB/8GB by project support) DDR3L memory onboard + 1 SODIMM up to 8GB
	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 <b>HW Decode:</b> H.264, MPEG2, VC1, VP8, H.265, MPEG4, MVC, VP9, WMV9, JPEG/MJPEG <b>HW Encode:</b> H.264, MPEG4, VP8, H.265, MVC
	Display	1 x HDMI <b>HDMI:</b> resolution up to 3840x2160@30Hz
STORAGE	eMMC	32GB/64GB Available(8GB/16GB by project support)
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
	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
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	4.5 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/ IP69K enclosure
	Shock	<b>Operation shock test:</b> Half Sine Wave 15G, 11ms, 3 Shock Per Axis
	Vibration	<b>Operation Vibration test:</b> IEC 60068-2-64
	Certifications	CE, FCC class A, ROHS

## ORDERING INFORMATION

Model Name	Part Number	Processor	Memory down	eMMC	USB 3.0	USB 2.0	LAN	HDMI	2 COM + 2 CAN bus	WIFI + BT	LTE	External Cable list		
												IP67 M12 4pin DC cable L=100mm	IP67 COM+ CAN cable L=300mm	M12 Lan cable L=300mm
ECX700-AL	750-ECX700-100G	x7-E3950	4GB	64GB	1	1	2	1	Y	Y	Y	1	1	2
	750-ECX700-200G	x5-E3930		32GB	2	-	2		Y	-	-		1	2
	750-ECX700-300G	x5-E3930		32GB	1	-	2		-	Y	Y		-	2
	750-ECX700-400G	x5-E3940		64GB	2	-	2		-	Y	Y		-	2
	750-ECX700-500G	x7-E3950		64GB	1	1	-		Y	-	Y		1	-
	750-ECX700-600G	x7-E3950		64GB	1	1	-		Y	Y	-		1	-

## OPTIONAL ITEMS

Optional Items	Part Number	Description
External USB cable	A81-001129-068G	IP67 USB Plug to USB Plug, 300mm
External HDMI cable	A81-026004-068G	IP67 HDMI Plug to HDMI Plug, 300mm