



KEY FEATURES



High Performance CPU

Intel® Coffee Lake Core i7 processor



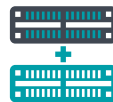
802.3af PoE Ports

4 x RJ45 type PoE ports at 15W



AI Accelerated

Up to 115W GPU MXM module supported



Scalability

Up to 5 M.2/mPCIe expansion slots



Support 5G Communication

Support 5G cellular module on USB3.0

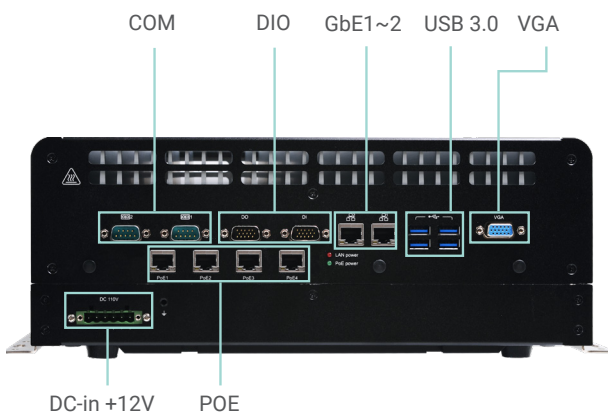


Wide-Temperature

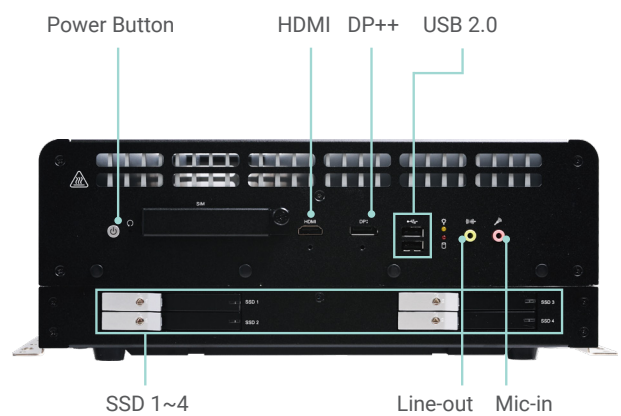
-20°C to 70°C operation in fanless



PANEL

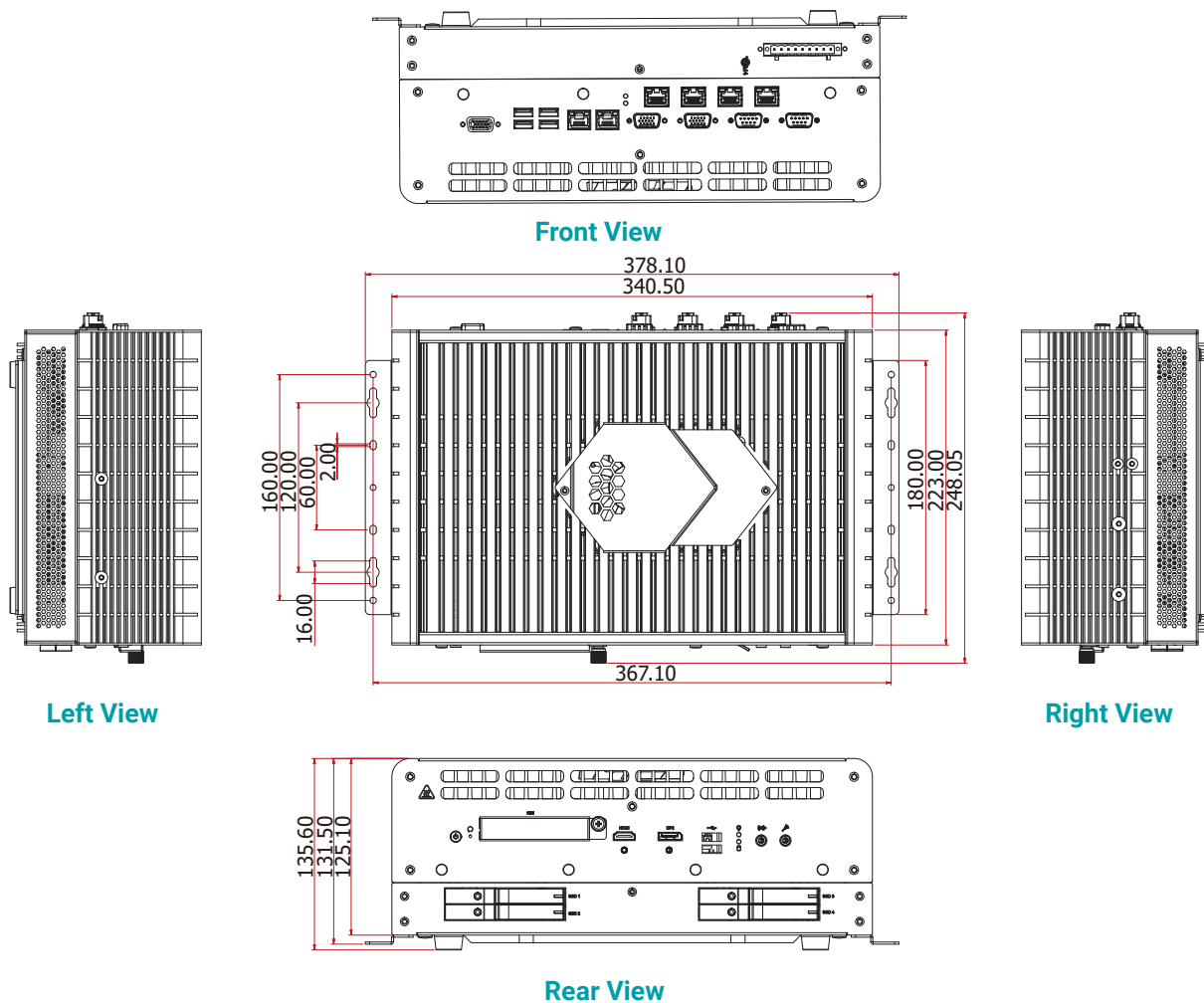


Front View

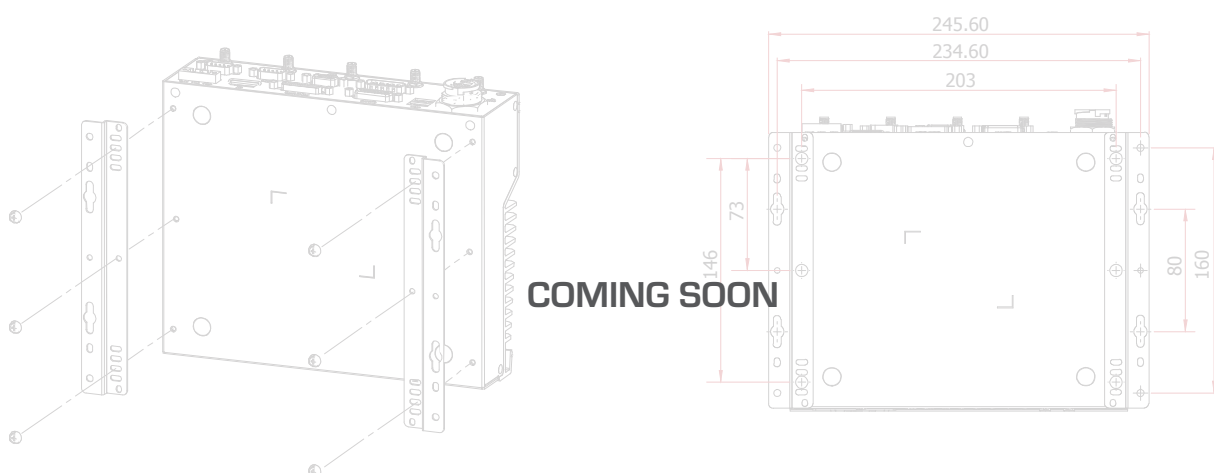


Rear View

DIMENSIONS



WALL MOUNTING



SPECIFICATION

SYSTEM	Processor	8th/9th Generation Intel® Core™ Processors, LGA 1151 - Intel® Core™ i7-9700TE 8C/8T 1.8GHz 12MB cache, TDP 35W with Q370PCH - Intel® Core™ i7-8700T 6C/12T 2.4GHz 12MB cache, TDP 35W with Q370PCH - Intel® Core™ i7-9700E 8C/8T 2.6GHz 12MB cache, TDP 65W with Q370PCH - Intel® Core™ i5-9500TE 6C/6T 2.2GHz 9MB cache, TDP 35W with Q370PCH - Intel® Core™ i3-9100TE 4C/4T 2.2GHz 6MB cache, TDP 35W with ECC with C246PCH	
	Chipset	Intel® Q370 Chipset	
	Memory	Dual Channel DDR4 2666/2400 MHz by SODIMMs up to 64GB	
	BIOS	AMI SPI 128Mbit	
GRAPHICS	Controller	Intel® HD Graphics	
	GPU	Support MXM 3.1 Type A/B/C: RTX2080, RTX2070, RTX2060, GTX1060 modules (Please contact your sales representative for more MXM options) Maximum package power 115W, inrush current 150W PCIe x16	
	Display	1 x VGA (display out by DB15 connector) 1 x HDMI (with screw lock) 1 x DP++ (standard display port connector DIP type with screw lock) support NVIDIA Optimus technology	VGA: resolution up to 1920x1200 @ 60Hz HDMI: resolution up to 4096x2160 @ 24Hz DP++: resolution up to 4096x2304 @ 60Hz
STORAGE	External	4 x Swappable 2.5" storage bays with lock. Supports 7mm SSD devices	
EXPANSION	Interface	1 x Half-size Mini PCIe for WiFi/BT modules, with PCIe x1 & USB signal 2 x Full-size Mini PCIe support PCIe x1 & USB 2.0 signal with SIM of each (All SIM Cards can be external accessible with cover against vibration) 1 x M.2 B key support PCIe x1, USB2.0, USB3.0 signal with SIM slot (SIM card can be external accessible with cover) 1 x M.2 2280 M key supports 2242, 2260 & 2280 devices (PCIe x4 & SATA signal, support boot up function)	
AUDIO	Audio Codec	Realtek ALC888	
ETHERNET	Controller	5 x Intel® I210IT NIC (10/100/1000Mbps) 1 x Intel® I219LM PHY (10/100/1000Mbps)	
	Interface	2 x RJ45 GbE 4 x 802.3af 15W PoE ports	
LED	Indicators	1 x Power LED (green) 5 x Storage LED (red) 4 x PoE LED	
FRONT I/O	Ethernet	2 x GbE (RJ-45) support wake on Lan	
	Serial	2 x High speed full RS-232/422/485 (DB-9) 2 x RS-232/422/485 (onboard)	
	DIO	1 x 8bit isolated DI port by DB-9 connector 1 x 8bit isolated DO port by DB-9 connector 2KV isolation	
	Display	1 x VGA display out by DB15 connector	
	USB	4 x USB 3.0 (type A)	
	Power-in	1 x 9pins 5.0mm terminal block	
	PoE	4 x RJ45 802.3af PoE Support 802.11af, max 15.4W (PSE side) NOT support wake on Lan	
REAR I/O	USB	2 x USB 2.0 (type A)	
	Display	1 x HDMI 1 x DP++	
	Audio	1 x Mic-in 1 x Line-out by 3.5mm 3P phone jack	
	Buttons	1 x Power button 1 x Reset button	
	SIM	3 x SIM sockets (external accessible with cover)	
	Antenna Holes	7 x SMA type antenna hole for GNSS, WWAN/LTE MIMO, WLAN/ BT MIMO, 5G	
WATCHDOG TIMER	Output & Interval	System reset, programmable via software from 1 to 255 seconds	
SECURITY	TPM	TPM 2.0	
POWER	Type	+12VDC Reverse polarity protection	
	Connector	9 pin 5.0mm terminal block	
OS SUPPORT	OS Support	Windows 10 IoT Enterprise 64 Bit Ubuntu 18.04	

SPECIFICATION

MECHANISM	Construction	Metal + Aluminum
	Mounting	Wall mount
	Dimensions (W x H x D)	340.5(W) x 132(H) x 223(D)mm (3U height, excluding rubber foot)
	Weight	9.85 kg
ENVIRONMENT	Operating Temperature	-20°C to 70°C with GTX1060, RTX2060 -20°C to 55°C with RTX2070 CPU and GPU may be throttling at high temperature Active fan for supporting higher temperature or higher power MXM is supported per request
	Storage Temperature	-40 to 85°C
	Relative Humidity	10% to 90% (non-condensing)
STANDARDS AND CERTIFICATIONS	Shock (SSD/HDD)	EN61373: 2010, Category 1 Class A & Class B
	Vibration	EN61373: 2010, Category 1 Class B
	IP rating	IP40
	Certification	CE, FCC Class B (tested with adapter)

PACKING LIST

1 EC300-CS system unit
1 Power connector
1 Mounting bracket