ECS-9200MXC Series

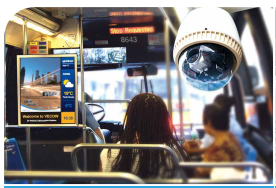
7th Generation Intel® Xeon®/Core™ i7/i5/i3 (Kaby Lake) Fanless Embedded System with Intel® C236, 10-port GigE LAN w/8 M12 PoE+/LAN Bypass, 2 CAN Bus, 2 Front-access SSD Tray, 8 USB 3.0, M.2 Socket, 3 SIM, 32 Isolated DIO, High Performance, Rugged, -40°C to 75°C Extended Temperature



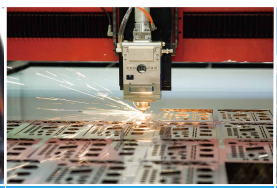




- 10 Independent GigE LAN support up to 8 M12 IEEE 802.3at PoE+, dual LAN Bypass, iAMT 11.0
- Rugged X-coded M12 interface supports up to 10Gbps data transmission
- Storage: 2 2.5" SSD Tray, 1 CFast, 2 SATA III
- 6V to 36V DC Power Input with 80V Surge Protection
- Configurable Ignition Power Control
- Fanless, -40°C to 75°C Operating Temperature
- LGA 1151 Socket supports workstation-grade Intel® Xeon®/Core™ i7/i5/i3 Processor (Kaby Lake/Skylake) with C236 chipset
- 2-port CAN Bus, 3 Mini PCIe/mSATA, 1 M.2
- 32 Isolated DIO, 8 USB 3.0, 4 COM
- 3 External SIM Socket for 3G/4G/LTE/WiFi/GPRS/UMTS



Intelligent Surveillance



Machine Vision



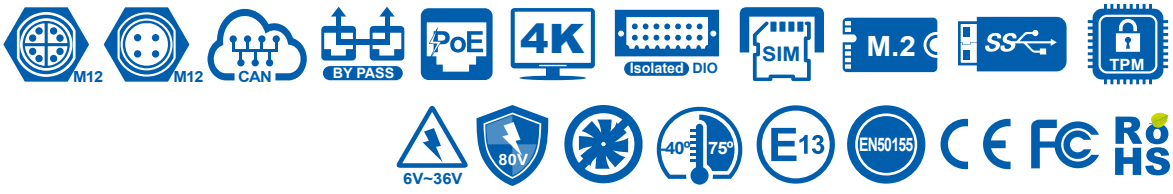
ITS (Intelligent Transportation System)



Smart Manufacturing



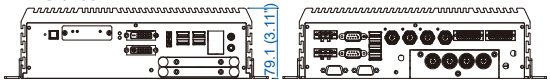
GPS Navigation



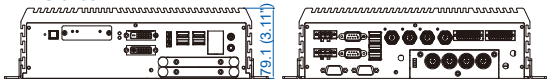
Vecow

Dimensions & Drawing Unit: mm (inch)

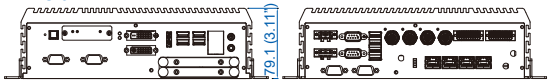
ECS-9208MP



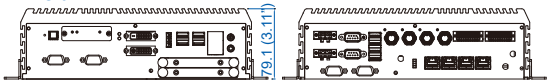
ECS-9208M



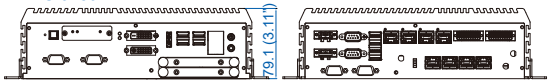
ECS-9244MXC



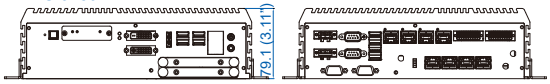
ECS-9244MC

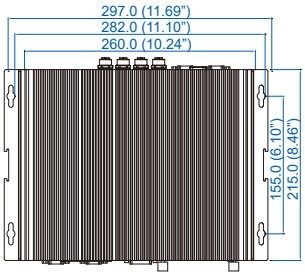


ECS-9280C



ECS-9280





Specifications

System

Processor	Quad Core Intel® Xeon®/Core™ i7/i5/i3 Processor (Kaby Lake-S/Skylake-S)
Chipset	Intel® C236
BIOS	AMI
SIO	IT8786E
Memory	2 DDR4 2400MHz SO-DIMM, up to 64GB (ECC/Non-ECC)
OS	Windows 10, Windows 8.1, Windows 7, Linux

I/O Interface

Serial	4 COM RS-232/422/485 (ESD 8KV)
USB	• 8 USB 3.0 (4 Front, 4 Rear) • 1 USB 2.0 (Internal)
Isolated DIO	32 Isolated DIO : 16 DI, 16 DO
LED	Power, HDD, Wireless, PoE
SIM Card	3 External SIM Card Socket (1 for CAN Bus, Optional)
CAN Bus	2-port CAN 2.0 A/B

Expansion

Mini PCIe	3 Full-size for PCIe/USB/External SIM Card/mSATA
M.2	1 M.2 Socket (Key ID : M)

Graphics

Processor	Intel® HD Graphics P630/630/P530/530
Interface	• DVI-I : Up to 1920 x 1200 @ 60Hz • DVI-D : Up to 1920 x 1200 @ 60Hz • DisplayPort : Up to 4096 x 2304 @ 60Hz

Storage

SATA	2 SATA III (6Gbps) support S/W RAID 0, 1
mSATA	3 SATA III (Mini PCIe Type, 6Gbps)
Storage Device	• 1 CFast Socket, Push-in/Push-out Ejector • 2 Front-access 2.5" SSD/HDD Tray

Audio

Audio Codec	Realtek ALC888S-VD, 7.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out

Power

Power Input	6V to 36V, DC-in
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Ignition Control	16 Mode (Internal)
Remote Switch	3-pin Terminal Block
Surge Protection	Up to 80V/1ms Transient Power

Ethernet

LAN 1	Intel® I219LM GigE LAN supports iAMT 11.0
LAN 2	Intel® I210 GigE LAN

PoE/LAN Bypass (M12)

LAN 3 to LAN 6	GigE IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210 with Power On/Off Control, X-coded/A-coded M12 Connector
LAN 7 to LAN 10	**ECS-9208M :** GigE IEEE 802.3at (25.5W/48V) PoE+ with Power On/Off Control/LAN Bypass mode by Intel® I350, A-coded M12 Connector **ECS-9244/9280 :** GigE IEEE 802.3at (25.5W/48V) PoE+ with Power On/Off Control/LAN Bypass mode by Intel® I350

Others

TPM	Optional Infineon SLB9665 supports TPM 2.0, LPC Interface
Watchdog Timer	Reset : 1 to 255 sec./min. per step
Smart Management	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.

Mechanical

Dimensions	260mm x 215mm x 79mm (10.2" x 8.5" x 3.1")
Weight	4.3 kg (9.48 lb)
Mounting	• Wallmount by mounting bracket • DIN Rail Mount (Optional) • 2U Rackmount (Optional)

Environment

Operating Temp.	**35W TDP CPU :** • Core™ i7, i5, i3 : -40°C to 75°C (-40°F to 167°F) • Xeon® E3-1268L v5 : -40°C to 70°C (-40°F to 158°F) **65W TDP CPU :** Core™ i7, i5, i3 : -40°C to 55°C (-40°F to 131°F) **80W TDP CPU :** Xeon® E3-1275 v6, E3-1275 v5, E3-1225 v5 : -40°C to 45°C (-40°F to 113°F)
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @ 75°C
Shock	• IEC 60068-2-27 • SSD : 50G @ wallmount, Half-sine, 11ms
Vibration	• IEC 60068-2-64 • SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	E13, CE, FCC, EN50155, EN50121-3-2

Order Information

ECS-9208MP	• ECS-9200, 10 GigE LAN w/4 A-coded M12 PoE+, 2-pair LAN Bypass, 1 M.2, 2 SSD Tray, 8 USB 3.0, 4 COM, 3 SIM, 32 Isolated DIO
ECS-9208M	• ECS-9200, 10 GigE LAN w/8 A-coded M12 PoE+, 1 M.2, 2 SSD Tray, 8 USB 3.0, 4 COM, 3 SIM, 32 Isolated DIO
ECS-9244MXC	• ECS-9200, 10 GigE LAN w/4 X-coded M12 PoE+, 4 PoE+, 2 CAN Bus, 2 SSD Tray, 8 USB 3.0, 4 COM, 2 SIM, 32 Isolated DIO
ECS-9244MC	• ECS-9200, 10 GigE LAN w/4 A-coded M12 PoE+, 4 PoE+, 2 CAN Bus, 2 SSD Tray, 8 USB 3.0, 4 COM, 2 SIM, 32 Isolated DIO
ECS-9280C	• ECS-9200, 10 GigE LAN w/8 PoE+, 2 CAN Bus, 2 SSD Tray, 8 USB 3.0, 4 COM, 2 SIM, 32 Isolated DIO
ECS-9280	• ECS-9200, 10 GigE LAN w/8 PoE+, 2 SSD Tray, 8 USB 3.0, 4 COM, 3 SIM, 32 Isolated DIO
DDR4 32G	• Certified DDR4 32GB 2666MHz RAM
DDR4 16G	• Certified DDR4 16GB 2400/2133 MHz RAM
DDR4 8G	• Certified DDR4 8GB 2400/2133 MHz RAM
DDR4 4G	• Certified DDR4 4GB 2400/2133 MHz RAM
PWA-280W-WT	• 280W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
PWA-160W-WT	• 160W, 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 Kit	• DIN Rail and VESA Mounting Kit
Rack Mount	• 2U Rackmount Kit
TMK2-20P-100	• Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm
TMK2-20P-500	• Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm
TMB-TMBK-20P	• Terminal Board with One 20-pin Terminal Block Connector and DIN-Rail Mounting
4G Module	• Mini PCIe 4G/GPS Module with Antenna
WiFi & Bluetooth	• WiFi & Bluetooth Module with Antenna

CPU List

Series	CPU	Cache (MB)	Turbo Freq. (GHz)	TDP (W)	ECC Memory
Intel® Xeon®	E3-1275 v6	8	4.2	80	Y
	E3-1275 v5		4	80	
	E3-1225 v5		3.7	80	
	E3-1268L v5		3.4	35	
Intel® Core™	i7-7700	8	4.2	65	NA
	i7-7700T		3.8	35	
	i7-6700		4	65	
	i7-6700TE		3.4	35	
	i5-7500	6	3.8	65	NA
	i5-7500T		3.3	35	
	i5-6500		3.6	65	
	i5-6500TE		3.3	35	
	i3-7101E	3	3.9	65	Y
	i3-7101TE		3.4	35	
	i3-6100	4	3.7	65	
	i3-6100TE		2.7	35	

ECS-9200MXC-20210319

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