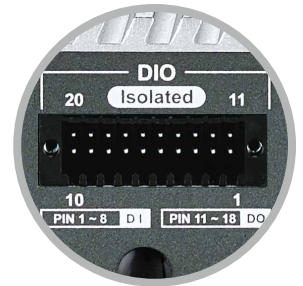
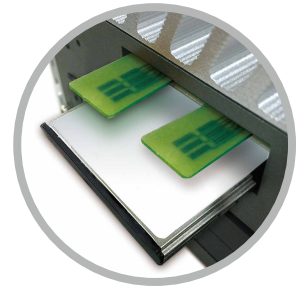
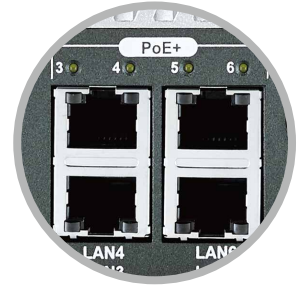


# ECS-4000 Series

Intel® Core™ i7/i5/i3 Processor (Broadwell-U) Fanless Embedded System, 6 Gigabit LAN with 4 IEEE 802.3at PoE+, 2 Front-access SSD/HDD Tray, 2 External SIM Socket, 1 CFast Socket, 16 Isolated DIO, High Performance, Slim, Rugged, Extended Temperature

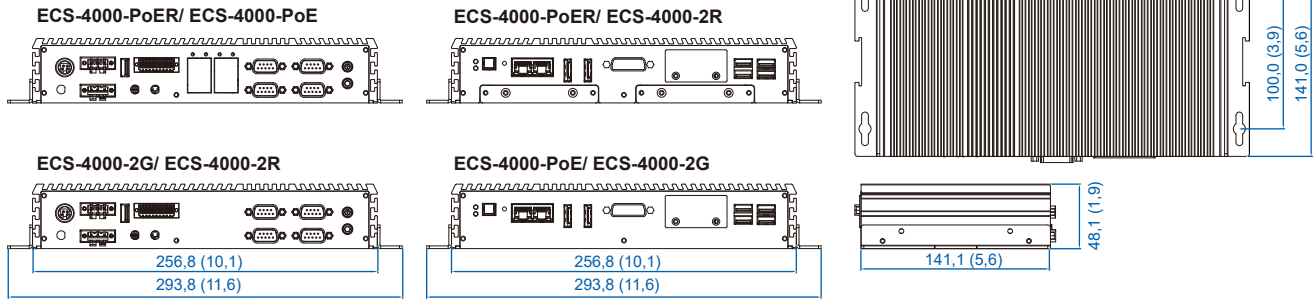


- 5th Generation Intel® SoC (Broadwell-U)
- Supports 4K Resolution, up to 3 independent displays
- 6 Gigabit LAN with 4 IEEE 802.3at PoE+
- Fanless, -25°C to 70°C Operating Temperature
- 16 Isolated DIO (8 DI, 8 DO)
- 2 Mini PCIe for 3G/4G/LTE/WiFi/GPRS/UMTS
- 2 External SIM Card Socket
- 2 Front-access SSD/HDD Tray
- 6V to 36V DC-in, 80V Surge Protection
- Configurable Ignition Power Control



# Dimensions & Drawing

Unit: mm (inch)



## Specifications

System		PoE	
<b>Processor</b>	Intel® Core™ i7/i5/i3 Processor (Broadwell-U)	<b>LAN 3</b>	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210
<b>BIOS</b>	AMI	<b>LAN 4</b>	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210
<b>SIO</b>	IT8786E	<b>LAN 5</b>	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210
<b>Memory</b>	2 DDR3L 1333/1600 MHz SO-DIMMs, up to 16GB	<b>LAN 6</b>	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210
<b>OS</b>	Windows 8, Windows 7, Linux		
I/O Interface		Power	
<b>Serial</b>	4 COM RS-232/422/485	<b>Input Voltage</b>	6V to 36V, DC-in
<b>USB</b>	• 2 USB 3.0 • 4 USB 2.0 (3 External, 1 Internal)	<b>Power Input</b>	• 3-pin Terminal Block : V+, V-, Frame Ground • Mini-DIN 4-pin
<b>Isolated DIO</b>	16 Isolated DIO : 8 DI, 8 DO (ECS-4000-PoER, ECS-4000-PoE)	<b>Ignition Control</b>	16 Mode (Internal)
<b>DIO</b>	16 DIO : 8 DI, 8 DO (ECS-4000-2G, ECS-4000-2R)	<b>Remote Switch</b>	3-pin Terminal Block : On, Off, IGN
<b>LED</b>	Power, HDD, PoE	<b>Surge Protection</b>	Up to 80V/1ms Transient Power
<b>SIM Card</b>	2 SIM Card Socket (External)		
Expansion		Others	
<b>Mini PCIe</b>	• 1 supports PCIe/USB/External SIM • 1 supports PCIe/USB/External SIM/mSATA	<b>TPM</b>	Optional Infineon SLB9665 supports TPM 2.0, LPC Interface
		<b>Watchdog Timer</b>	Reset : 1 to 255 sec./min. per step
		<b>Smart Management</b>	Wake on LAN, PXE supported
		<b>HW Monitor</b>	Monitoring temperature, voltages. Auto throttling control when CPU overheats
Graphics		Mechanical	
<b>Controller</b>	Intel® HD Graphics 6000	<b>Dimension</b>	257mmx 141mmx 48mm (10.1" x 5.6" x 1.9") (W x L x H)
<b>Interface</b>	• DVI-D : Up to 1920 x 1080 @ 60Hz • DisplayPort 1 : Up to 3840 x 2160 @ 60Hz • DisplayPort 2 : Up to 3840 x 2160 @ 60Hz	<b>Weight</b>	2.1 kg (4.6 lb)
		<b>Mounting</b>	• Wallmount by mounting bracket • DIN Rail Mount
Storage		Environment	
<b>SATA</b>	2 SATA III (6Gbps)	<b>Operating Temp.</b>	-25°C to 70°C (-13°F to 158°F)
<b>mSATA</b>	1 SATA III (Mini PCIe Type, 6Gbps)	<b>Storage Temp.</b>	-40°C to 85°C (-40°F to 185°F)
<b>Storage Device</b>	• 1 CFast Slot, Push-in/ Push-out Ejector • 2 2.5" SSD/HDD Tray (ECS-4000-PoER, ECS-4000-2R)	<b>Humidity</b>	5% to 95% Humidity, non-condensing
		<b>Relative Humidity</b>	95% @ 70°C
		<b>Shock</b>	• IEC 60068-2-27 • SSD : 50G @ wallmount, Half-sine, 11ms • IEC 60068-2-64
Audio		<b>Vibration</b>	• SSD : 5Grms, 5Hz to 500Hz, 3 Axis
<b>Audio Codec</b>	Realtek ALC888S-VD, 7.1 Channel HD Audio	<b>EMC</b>	CE, FCC, EN50155, EN50121-3-2, EN60945
<b>Audio Interface</b>	1 Mic-in, 1 Line-out		
Ethernet			
<b>LAN 1</b>	Intel® I218 Gigabit LAN supports iAMT		
<b>LAN 2</b>	Intel® I210 Gigabit LAN		

## Order Information

<b>ECS-4000-PoER650U</b>	• ECS-4000, Intel® Core™ i7-5650U Processor (Broadwell-U), 6 GbE LAN with 4 PoE+, 2 Front-access SSD, 4 COM, 6 USB, Isolated DIO
<b>ECS-4000-PoER350U</b>	• ECS-4000, Intel® Core™ i5-5350U Processor (Broadwell-U), 6 GbE LAN with 4 PoE+, 2 Front-access SSD, 4 COM, 6 USB, Isolated DIO
<b>ECS-4000-PoER010U</b>	• ECS-4000, Intel® Core™ i3-5010U Processor (Broadwell-U), 6 GbE LAN with 4 PoE+, 2 Front-access SSD, 4 COM, 6 USB, Isolated DIO
<b>ECS-4000-PoE650U</b>	• ECS-4000, Intel® Core™ i7-5650U Processor (Broadwell-U), 6 GbE LAN with 4 PoE+, 4 COM, 6 USB, Isolated DIO
<b>ECS-4000-PoE350U</b>	• ECS-4000, Intel® Core™ i5-5350U Processor (Broadwell-U), 6 GbE LAN with 4 PoE+, 4 COM, 6 USB, Isolated DIO
<b>ECS-4000-PoE010U</b>	• ECS-4000, Intel® Core™ i3-5010U Processor (Broadwell-U), 6 GbE LAN with 4 PoE+, 4 COM, 6 USB, Isolated DIO
<b>ECS-4000-2G650U</b>	• ECS-4000, Intel® Core™ i7-5650U Processor (Broadwell-U), 2 GbE LAN, 4 COM, 6 USB, 16 DIO
<b>ECS-4000-2G350U</b>	• ECS-4000, Intel® Core™ i5-5350U Processor (Broadwell-U), 2 GbE LAN, 4 COM, 6 USB, 16 DIO
<b>ECS-4000-2G010U</b>	• ECS-4000, Intel® Core™ i3-5010U Processor (Broadwell-U), 2 GbE LAN, 4 COM, 6 USB, 16 DIO
<b>ECS-4000-2R650U</b>	• ECS-4000, Intel® Core™ i7-5650U Processor (Broadwell-U), 2 GbE LAN, 2 Front-access SSD, 4 COM, 6 USB, 16 DIO
<b>ECS-4000-2R350U</b>	• ECS-4000, Intel® Core™ i5-5350U Processor (Broadwell-U), 2 GbE LAN, 2 Front-access SSD, 4 COM, 6 USB, 16 DIO
<b>ECS-4000-2R010U</b>	• ECS-4000, Intel® Core™ i3-5010U Processor (Broadwell-U), 2 GbE LAN, 2 Front-access SSD, 4 COM, 6 USB, 16 DIO
<b>M340L-W28M1</b>	• Vecow DDR3L 4GB 1333/1066 MHz RAM, Wide Temperature -40°C to +85°C
<b>DDR3L8G</b>	• Certified DDR3L-1600 8G RAM
<b>DDR3L4G</b>	• Certified DDR3L-1600 4G RAM
<b>PWA-120WM4P</b>	• 120W, 24V, 90V AC to 264V AC Power Adaptor with 4-pin Mini-DIN Connector
<b>PWA-120W</b>	• 120W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block
<b>PWA-160W-WT</b>	• 160W, 24V, 85V AC to 264V AC Power Adaptor with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
<b>TMBK-20P-100</b>	• Terminal Block 20-pin to SCSI Cable, 100cm
<b>TMBK-20P-500</b>	• Terminal Block 20-pin to SCSI Cable, 500cm
<b>TMB-SCSI-20P</b>	• Terminal Board with One 20-pin SCSI Connector and DIN-Rail Mounting

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