

ECS-8000 Series

Quad Core 5th Gen Intel® Core™ i7 Mobile Processor (Broadwell-H) Fanless Embedded System with Intel® QM87 Chipset, 6 Gigabit LAN with 4 PoE+, 2 2.5" SSD/ HDD, Isolated DIO, High Performance, Rugged, Extended Temperature.



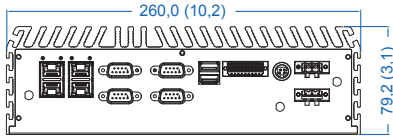
- Quad Core 5th Gen Intel® Core™ i7 Mobile Processor (Broadwell-H)
- Fanless, -25°C to 70°C Operating Temperature
- 6 Gigabit LAN with 4 IEEE 802.3at PoE+ (Optional)
- 3 Mini PCIe for 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS
- 2 External SIM Card Socket, 1 External CFAST Socket
- VGA/ DVI-D/ DisplayPort/ eDP Interface, up to 3 independent 4K displays
- 16 Isolated DIO : 8 DI, 8 DO (Optional)
- 2 Front-access 2.5" SSD/ HDD Tray (Optional)
- 6V to 36V DC-in, 80V Surge Protection
- Configurable Ignition Power Control



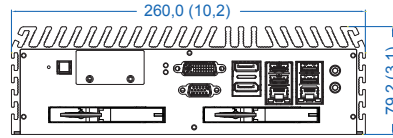
Dimensions & Drawing

Unit: mm (inch)

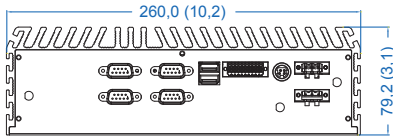
ECS-8000-PoER/ ECS-8000-PoE



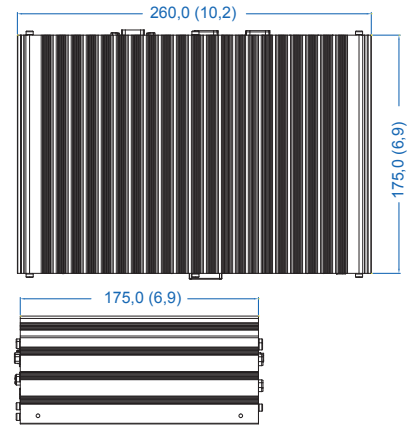
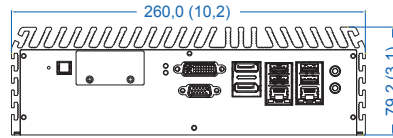
ECS-8000-PoER/ ECS-8000-2R



ECS-8000-2G/ ECS-8000-2R



ECS-8000-PoE/ ECS-8000-2G



Specifications

System

Processor	Quad Core 5 th Gen Intel® i7/ i5/ i3 Mobile Processor (Broadwell-H)
Chipset	Intel® QM87
BIOS	AMI
SIO	IT8786E
Memory	<ul style="list-style-type: none"> • DDR3L 1600MHz • Up to 32GB • 2 204-pin SO-DIMM Socket

I/O Interface

Serial	4 COM RS-232/ 422/ 485
USB	<ul style="list-style-type: none"> • 4 USB 3.0 (External) • 3 USB 2.0 (2 External, 1 Internal)
Isolated DIO	16 Isolated DIO : 8 DI, 8 DO (Optional)
LED	Power, HDD, PoE
SIM Card	2 SIM Card Socket (External)
GPIO	16 GPIO

Expansion

Mini PCIe	3 Mini PCIe Socket : <ul style="list-style-type: none"> • 2 Full-size for PCIe/ USB/ External SIM Card/ mSATA • 1 Half-size for PCIe/ USB
SUMIT A, B	2 SUMIT Slot (optional)

Graphics

Chipset	<ul style="list-style-type: none"> • Intel® Iris™ Pro Graphics 6200 (5850EQ) • Intel® HD Graphics 5600 (5700EQ)
Interface	<ul style="list-style-type: none"> • DisplayPort 1 : Up to 4096 x 2304 @ 60Hz • DisplayPort 2 : Up to 4096 x 2304 @ 60Hz • DVI-D : Up to 1920 x 1080 @ 60Hz • VGA : Up to 1920 x 1200 @ 60Hz • eDP : Up to 4096 x 2304 @ 60Hz

Storage

SATA	2 SATA III (6Gbps)
mSATA	1 SATA III (Mini PCIe Type, 6Gbps)
SATA DOM	1 SATA II (3Gbps)
Storage Device	<ul style="list-style-type: none"> • 1 CFast Socket, Push-in/ Push-out Ejector • 2 Front-access 2.5" SSD/ HDD Tray (Optional)

Audio

Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out

Ethernet

LAN 1	Intel® I218 Gigabit LAN supports iAMT 9.5
LAN 2	Intel® I210 Gigabit LAN

PoE

LAN 3	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210
LAN 4	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210
LAN 5	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210
LAN 6	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210

Power

Power Input	6V to 36V, DC-in
Power Interface	<ul style="list-style-type: none"> • 3-pin Terminal Block : V+, V-, Frame Ground • Mini-DIN 4-pin
Ignition Control	16 Mode (Internal)
Remote Switch	3-pin Terminal Block : On, Off, IGN
Surge Protection	Up to 80V/1ms Transient Power

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

Software Support

OS	Windows 8, Windows 7, Linux
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Mechanical

Dimension	260mm x 175mm x 79mm (10.2" x 6.9" x 3.1")
Weight	2.8 kg (6.2 lb)
Mounting	<ul style="list-style-type: none"> • Wallmount by mounting bracket • DIN Rail Mount

Environment

Operating Temp.	-25°C to 70°C (-13°F to 158°F)
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @ 70°C
Shock	<ul style="list-style-type: none"> • IEC 60068-2-27 • SSD : 50G @ wallmount, Half-sine, 11ms • IEC 60068-2-64
Vibration	<ul style="list-style-type: none"> • SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	CE, FCC, EN 50155, EN 50121-3-2

Order Information

ECS-8000-PoER850Q	• ECS-8000, Quad Core 5 th Gen Intel® Core™ i7-5850EQ Processor (Broadwell-H), 6 GbE LAN with 4 PoE+, 2 Front-access SSD, Isolated DIO
ECS-8000-PoER700Q	• ECS-8000, Quad Core 5 th Gen Intel® Core™ i7-5700EQ Processor (Broadwell-H), 6 GbE LAN with 4 PoE+, 2 Front-access SSD, Isolated DIO
ECS-8000-PoE850Q	• ECS-8000, Quad Core 5 th Gen Intel® Core™ i7-5850EQ Processor (Broadwell-H), 6 GbE LAN with 4 PoE+, Isolated DIO
ECS-8000-PoE700Q	• ECS-8000, Quad Core 5 th Gen Intel® Core™ i7-5700EQ Processor (Broadwell-H), 6 GbE LAN with 4 PoE+, Isolated DIO
ECS-8000-2G850Q	• ECS-8000, Quad Core 5 th Gen Intel® Core™ i7-5850EQ Processor (Broadwell-H), 2 GbE LAN, 32 GPIO
ECS-8000-2G700Q	• ECS-8000, Quad Core 5 th Gen Intel® Core™ i7-5700EQ Processor (Broadwell-H), 2 GbE LAN, 32 GPIO
ECS-8000-2R850Q	• ECS-8000, Quad Core 5 th Gen Intel® Core™ i7-5850EQ Processor (Broadwell-H), 2 GbE LAN, 2 Front-access SSD, 32 GPIO
ECS-8000-2R700Q	• ECS-8000, Quad Core 5 th Gen Intel® Core™ i7-5700EQ Processor (Broadwell-H), 2 GbE LAN, 2 Front-access SSD, 32 GPIO
M340L-W28M1	• Vecow DDR3L 4GB 1333/1066 MHz RAM, Wide Temperature -40°C to +85°C
DDR3L8G	• Certified DDR3L 8G RAM
DDR3L4G	• Certified DDR3L 4G RAM
PWA-120W	• 120W, 24V, 90VAC to 264VAC Power Adapter with 3-pin Terminal Block
PWA-160W-WT	• 160W, 24V, 85VAC to 264VAC Power Adaptor with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
PWA-120WM4P	• 120W, 24V, 90VAC to 264VAC Power Adaptor with 4-pin Mini-DIN Connector

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