

IVH-9016-PoER RUGGED EMBEDDED COMPUTER

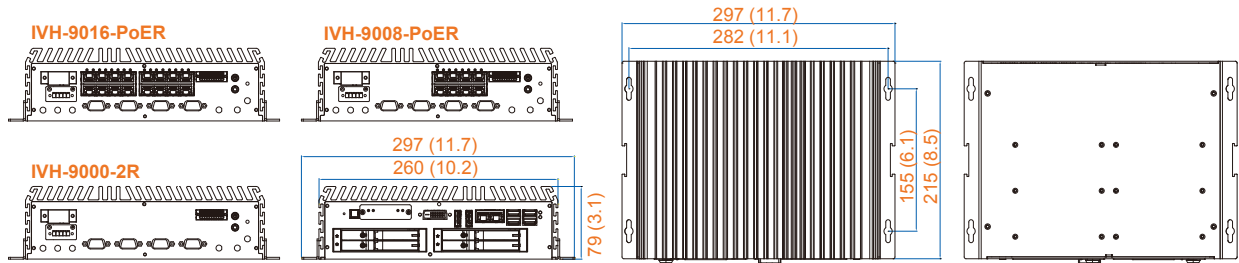
Quad Core 6th Gen Intel® Xeon®/ Core™ i7/ i5/ i3 Processor (Skylake-H) In-Vehicle Fanless Embedded System with Intel® CM236, 18 GigE LAN with 16 PoE+, 4 Front-access SSD Tray, Isolated DIO, High Performance, Rugged, Extended Temperature



- Quad Core 6th Generation Intel® Xeon®/ Core™ i7/ i5/ i3 Processor (Skylake-H) with CM236 Chipset supports up to 4K displays
- Fanless, -25°C to 70°C Operating Temperature
- 18 GigE LAN with 16 IEEE 802.3at PoE+ compliant
- 4 Mini PCIe, 4 SIM Card Socket (3 External)
- 4 Front-access 2.5" SSD Tray, 5 USB
- Supports 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS
- 16 Isolated DIO, 16 GPIO
- Configurable Ignition Power Control
- 6V to 78V DC-in, 200V Surge Protection
- UPS Supported (Optional)



Dimensions & Drawing Unit: mm (inch)



Specifications

System

Processor	Intel® Xeon® E3-1505M v5/ Core™ i7-6820EQ/ i5-6440EQ Processor (Skylake-H)
Chipset	Intel® CM236
BIOS	AMI
SIO	IT8786E
Memory	2 DDR4 2133MHz SO-DIMM, up to 32GB (ECC Function enable depends on processor support)

I/O Interface

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

Expansion

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

Graphics

Processor	Intel® HD Graphics P530/ 530
Display Memory	Shared Memory, up to 1.7GB
Interface	<ul style="list-style-type: none"> • DVI-D : Up to 1920 x 1200 @ 60Hz • DisplayPort 1 : Up to 4096 x 2304 @ 60Hz • DisplayPort 2 : Up to 4096 x 2304 @ 60Hz

Storage

SATA	6 SATA III (6Gbps) support S/W RAID 0, 1, 5, 10
mSATA	1 SATA III (Mini PCIe Type, 6Gbps)
Storage Device	<ul style="list-style-type: none"> • 1 CFast Socket, Push-in/ Push-out Ejector • 4 Front-access 2.5" SSD/ HDD Tray

Audio

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

Ethernet

LAN 1	Intel® I219 GigE LAN supports iAMT 11.0
LAN 2	Intel® I210 GigE LAN

PoE

IVH-9016 LAN 3 to 18	GigE IEEE 802.3at (25.5W/48V) PoE* by Intel® I350
IVH-9008 LAN 3 to 10	GigE IEEE 802.3at (25.5W/48V) PoE* by Intel® I350

Power

Power Input	6V to 78V, DC-in
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Ignition Control	16 Mode (Internal)
Remote Switch	5-pin Terminal Block : On, Off, IGN, LED+, LED-
Surge Protection	Up to 200V/1ms Transient Power Supported (Optional)
UPS	Supported (Optional)

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.
GPS	Onboard GPS Module supports Accelerometer, Gyroscope and Odometer (Optional)

Software Support

OS	Windows 10, Windows 8.1, Windows 7, Linux
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Mechanical

Dimensions (WxLxH)	260mm x 215mm x 79mm (10.2" x 8.5" x 3.1")
Weight	4.2 kg (9.26 lb)
Mounting	<ul style="list-style-type: none"> • Wallmount by mounting bracket • DIN Rail Mount (Optional) • 2U Rackmount (Optional)

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% at 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

IVH-9016-PoER505M	• IVH-9000, Quad Core Intel® Xeon® E3-1505M v5, 18 GigE LAN w/16 PoE*, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO
IVH-9016-PoER820Q	• IVH-9000, Quad Core Intel® Core™ i7-6820EQ, 18 GigE LAN w/16 PoE*, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO
IVH-9016-PoER440Q	• IVH-9000, Quad Core Intel® Core™ i5-6440EQ, 18 GigE LAN w/16 PoE*, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO
IVH-9008-PoER505M	• IVH-9000, Quad Core Intel® Xeon® E3-1505M v5, 10 GigE LAN w/8 PoE*, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO
IVH-9008-PoER820Q	• IVH-9000, Quad Core Intel® Core™ i7-6820EQ, 10 GigE LAN w/8 PoE*, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO
IVH-9008-PoER440Q	• IVH-9000, Quad Core Intel® Core™ i5-6440EQ, 10 GigE LAN w/8 PoE*, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO
IVH-9000-2R505M	• IVH-9000, Quad Core Intel® Xeon® E3-1505M v5, 2 GigE LAN, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO
IVH-9000-2R820Q	• IVH-9000, Quad Core Intel® Core™ i7-6820EQ, 2 GigE LAN, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO
IVH-9000-2R440Q	• IVH-9000, Quad Core Intel® Core™ i5-6440EQ, 2 GigE LAN, 4 SSD Tray, 4 COM, 4 USB 3.0, 4 SIM, Isolated DIO, 16 GPIO

IVH-9000-20160901

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