

## Features

- Intelligent Vehicle Ignition Interface**  
SoC-based monitoring reacts to turn on/off the system according to predefined on/off delays based on ignition status with a broad voltage input range of 8-35VDC.
- Certification**  
CE/FCC Class A, EMC-EN 55022 & 55024, Shock-IEC600858-2-27 and Vibration IEC60068-2-64 certificates for in-vehicle usage.
- Versatile I/O Functions**  
Triple Monitor Output, Up to 1 x Gigabit Ethernet Ports and either 8 or 16 PoE Ports, Multiple Serial Ports and USB Ports provide a host of functionalities.
- Dual mPCIe and USIM sockets**  
Sockets support 3G, 4G, LTE, WLAN and GPS cards.
- Solid State CFast drive**  
Operating System and applications run on Solid Status vibration proof internal CFast disk drive.
- Quad 2.5" HDD**  
Four (4) 2.5" removable HDD bays with hardware RAID 0, 1, 5, 10 configurations.
- Broad Temperature Range**  
-25C~60C at 100% CPU Processing level setting and HDD temperature specifications.
- Compact Size**  
255mm x 240mm x 71mm
- POE+**  
Eight (8) or Sixteen (16) POE+ Ports 25.4W each.
- Vehicle Application Specific Recording Software**  
WECU Surveillances **Surlytics VMS Software** supports two User Interfaces with vehicle specific functionalities such as: Touch Screen Interface, Multi-channel Instant Playback, Mutli-channel playback speed adjust, Multi-Channel Audio Monitoring, simple archiving, etc.
- Power on Record Mode**  
The **Surlytics VMS Software** supports Power on record mode to prevent operator error. When the system is powered it is recording with no operator interaction required. This guarantees recording without failure.

## FIRMUS II RUGGED PC - 8 or 16 PoE Series



## Applications

The 8 or 16 POE model **FIRMUS II RUGGED PC** is one in a series of 11 **FIRMUS II RUGGED PC** models. The series can be used for any application fixed or mobile where high reliability, high vibration or broad temperatures are required. WECU Surveillance typically uses this series as: Rugged DVR/NVR servers, Rugged Work Stations, High-End Digital Signage appliances, GPS tracking device, Wi-Fi, 3G/4G/LTE gateway or a combination of all the above.

Custom software development is available to meet customer specific needs. Contact us for more details.

## Models

Part Number	Description
CSRU1327	Rugged, PC, Intel™ i5, Fanless, 8 POE ports, 4x2.5" Drive bays, RAID 0, 1, 5, 10, ignition control, 8-35 V DC
CSRU1328	Rugged, PC, Intel™ i7, Fanless, 8 POE ports, 4x2.5" Drive bays, RAID 0, 1, 5, 10, ignition control, 8-35 V DC
CSRU1329	Rugged, PC, Intel™ i5, Fanless, 16 POE ports, 4x2.5" Drive bays, RAID 0, 1, 5, 10, ignition control, 8-35 V DC
CSRU1330	Rugged, PC, Intel™ i7, Fanless, 16 POE ports, 4x2.5" Drive bays, RAID 0, 1, 5, 10, ignition control, 8-35 V DC

## Options

Part Number	Description
CCCC0957	4GB DDR3 RAM, 0°C to 85°C
CCCC1294	8GB DDR3 RAM, 0°C to 85°C
CCCC1295	64GB Cfast MLC, 0°C to 70°C for Operating System
CCCC1331	110/220VAC to 24VDC, 280W Power Supply
CCSW0178	Windows 7-Pro 64-bit
CCSW0267	Windows Embedded Standard 64-bit

## Images



## Specifications

Part Number	CSRU1327	CSRU1328	CSRU1329	CSRU1330
Audio	1x mic-in and speaker-out			
CFast	1x CFast socket for Operating System			
Chipset	Intel® QM77 Platform Controller Hub with AMT & RAID support			
DC Input	1x 3-pin pluggable terminal block for 8~35V DC input (for direct DC wiring)			
Dimension	240 mm (W) x 255 mm (D) x 70 mm (H)			
Ethernet	1x Gigabit Ethernet port by Intel® 82579LM			
EMC	CE/FCC Class A, according to EN 55022 & EN 55024			
Graphics	Integrated Intel® HD Graphics 4000 Controller			
Humidity	10%~90% , non-condensing			
Ignition Control	Ignition power control with configurable on/off delay (V+/GND/IGN)			
KB/MS	1x 6-pin mini-DIN connector for PS/2 keyboard/mouse			
Memory	2x 204-pin SO-DIMM sockets, up to 16 GB DDR3 1333/1600 MHz SDRAM			
Mini PCI-E	1x internal mini PCI Express socket with USIM socket, 1x internal mini PCI Express socket			
Mounting	Wall-mounting (Standard)			
Operating Temperature	-25°C ~ 60°C */**			
POE	8x IEEE 802.3at (25.5W) PoE+ Ports with per-port power on/off control 80W total power budget		16x IEEE 802.3at (25.5W) PoE+ Ports with per-port power on/off control 160W total power budget	
Processor	Intel® Core™ i5-3610ME (2.7/3.3 GHz, 3 MB cache)	Intel® Core™ i7-3610QE (2.3/3.3 GHz, 6 MB cache)	Intel® Core™ i5-3610ME (2.7/3.3 GHz, 3 MB cache)	Intel® Core™ i7-3610QE (2.3/3.3 GHz, 6 MB cache)
Remote Ctrl. & Status Output	1x 10-pin (2x5) wafer connector for remote on/off control and status LED output			
SATA HDD	4x Internal SATA port for 2.5" HDD/SSD installation with RAID 0/1/5/10			
Serial Port	2x software-programmable RS-232/422/485 (COM1 & COM2)			
Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)			
Storage Temperature	-40°C ~ 85°C			
USB	2x USB 3.0 ports and 2x USB 2.0 ports			
Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes(w/ SSD, according to IEC60068-2-64)			
Video Port	1x DB-15 connector for analog RGB, supporting 2048x1536 resolution. 2x DVI-D connectors for DVI/HDMI outputs, supporting 1920x1080 resolution (Supporting dual independent display outputs)			
Weight	3.8 Kg			

\*The 100% CPU loading is applied using Intel® Thermal Analysis Tool. For detail testing criteria, please contact WECU Surveillance.

\*\*For sub-zero operating temperature, a wide temperature HDD drive or Solid State Disk (SSD) is required.