

Features

- 3 CPU options**
Celeron, i5 and i7 CPU options provide a range in price and processing power to match client requirements.
- 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**
E-Mark, 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 4 x Gigabit Ethernet Ports, Digital Inputs and Outputs, 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 mSATA drive**
Operating System and applications run on Solid Status vibration proof internal mSATA disk drive.
- Dual 2.5" HDD**
One (1) internal and one (1) removable HDD with hardware RAID 1 configuration enabling quick removal of evidence data.
- Broad Temperature Range**
-25C~70C depending on CPU Processing level setting and HDD temperature specifications. Utilizing a PGA-type CPU allows CPU throttling in BIOS for a range of temperatures.
- Compact Size**
210 mm (W) x 165 mm (D) x 59 mm (H) POE+ Four (4)
- 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-4POE Series



Applications

The 4 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 |
|-------------|---|
| CSRU0954 | Rugged PC, Intel® Celeron™, Fanless, 4 POE Ports, 2x2.5" HDD, ignition control, 8-35 V DC |
| CSRU0955 | Rugged PC, Intel® Core™i5, Fanless, 4 POE Ports, 2x2.5" HDD, ignition control, 8-35 V DC |
| CSRU0956 | Rugged PC, Intel® Core™i7, Fanless, 4 POE Ports, 2x2.5" HDD, 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 |
| CCSD1311 | 32GB mSATA MLC, 0°C to 70°C for Operating System |
| CCSD1312 | 64GB mSATA MLC, 0°C to 70°C for Operating System |
| CCCC0270 | 110/220VAC to 12VDC, 120W Power Supply |
| CCSW0178 | Windows 7-Pro 64-bit |
| CCSW0267 | Windows Embedded Standard 64-bit |

Images



Specifications

| Model | CSRU0954 | CSRU0955 | CSRU0956 |
|--|---|--|--|
| Audio | 1x mic-in and speaker-out | | |
| Certification | CE/FCC Class A, according to EN 55022 & EN 55024 & E-Mark for vehicle applications | | |
| Chipset | Intel® QM77 PCH with AMT & RAID support | | |
| DC Input | 8~35V DC input via 3-pin pluggable terminal block | | |
| Dimension | 210 mm (W) x 165 mm (D) x 59 mm (H) | | |
| Ethernet | 1x Gigabit Ethernet port by Intel® 82579LM and 3x Gigabit Ethernet ports by Intel® i210 | | |
| Graphics | Integrated Intel® HD Graphics 4000 Controller | | |
| Humidity | 10%~90%, non-condensing | | |
| Ignition Control | Ignition control with user-selectable on/off delay | | |
| Isolated DIO | 4x isolated DI with COS interrupt and 4x isolated DO | | |
| Memory | 1x 204-pin SO-DIMM sockets, Max 8GB DDR3 1333/1600 MHz SDRAM | | |
| Mini PCI-E | 1x full-size mini PCI Express socket with USIM socket and 1x half-size mini PCI Express socket | | |
| Mounting | Wall-mounting (Standard) or DIN-Rail mounting (Optional) | | |
| mSATA | 1x full-size mSATA, 32GB (optional up to 128GB) | | |
| Operating Temperature (100% CPU Loading) | `-25°C ~ 70°C** (Max Performance) | `-25°C ~ 50°C** (Max performance) | `-25°C ~ 50°C** (Max performance) |
| | | `-25°C ~ 70°C** (Reduce performance) | `-25°C ~ 60°C** (Reduce performance) |
| | | `-25°C ~ 70°C** (Extended temperature) | `-25°C ~ 70°C** (Extended temperature) |
| PoE | 4 x Compliant to IEEE 802.3at (25.5W) with per-port power on/off control | | |
| Processor | Intel® Celeron™ 1020E (2.2 GHz, 2 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) |
| SATA HDD | 1x Internal SATA port for 2.5" HDD/SSD and 1x Hot-swappable HDD tray for 2.5" HDD/SSD | | |
| 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 | 4x 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 DVI-I connector for VGA/DVI output, supporting 2048x1536 (VGA) or 1920x1080 (DVI) resolution and 2x DisplayPort, supporting 2560x1600 resolution | | |
| Weight | 2.4 Kg | | |

* The 100% CPU loading is applied using Passmark® BurnInTest™ v7.0. 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.

| Performance Setting | Celeron | Intel i5-3610ME | Intel i7-03610QE |
|----------------------|-------------|-----------------|------------------|
| Maximum Performance | 2100 / 70°C | 4388 / 60°C | 7407 / 50°C |
| Reduced Performance | | 3896 / 70°C | 5873 / 60°C |
| Extended Temperature | | | 3471 / 70°C |

CPU Benchmark Score / Operating Temperature