

LVR-8300

Fanless Rolling Stock Computer with
Intel® Core™ i5-4422E or Celeron 2002E
Processor



■ Features

- Rackmount Rolling Stock Control Box
- Intel® Core™ i5-4422E or Celeron 2002E Processor with QM87
- Support 16 x IEEE 802.11at PoE Ports
- Flexible I/O Module Design for Customization
- EN50155 Certification and MIL-STD-810G Compliance

■ Preliminary Specifications

Processor System

CPU	Core™ i5-4422E or Celeron 2002E
Frequency	1.8 GHz up to 2.90 GHz
Core Number	Dual-core
BIOS	AMI SPI Flash BIOS
Chipset	QM87

Memory

Technology	DDR3L 1333/1600 MHz, 1.35 V
Max. Capacity	16 GB
Socket	2 x 204-pin SODIMM

Ethernet

Controller	Intel i217
Speed	10/100/1000 Mbps
Interface	RJ-45
PoE	16 x IEEE 802.3af PoE ports

Storage

Type	SATA
Installation	Removable 2.5" 15mm drive bay x4 (HDD/SSD is not included)
Type	mSATA
Installation	1 x mSATA socket

I/O

COM	2 x RS232/422/485 with RI/5V/12V
USB	1 x type A USB 3.0, 2 x type A USB 2.0
Digital I/O	1x 26 pin terminal block connector for GPIO, 4x DI (5V or 12V TTL selectable), 4x DO (5V or 12V TTL selectable, Max. 100mA), 2x DO with Relay support 9~36V@max 2A each, 2x DI to Ignition MCU as remote control (5V or 12V TTL selectable) By optional LVK-IO1 plugable DI/O module

Antenna 6 x SMA antenna holes

Expansion

PCIe Mini-PCIe x 3 with 2 SIM card readers

Cooling

Processor	Passive CPU heatsink
System	Fanless design with corrugated aluminum

Environment

Operating Temperature	-20 ~ 60°C/-4~76°F (Follow EN50155T1)
Temperature with Commercial Components	-5 ~ 45°C/23~113°F
Relative Humidity	5~90%, non-condensing / 5~95%, non-condensing

Miscellaneous

Hardware Monitoring	Yes
Internal RTC with Li Battery	Yes

Mechanical

Dimension (W x H x D)	482.6 x 132 x 282 mm (19" x 5.2" x 11.1")
Weight	7.5 kg
Mounting	Rack mounting

Power

Connector	3-pin terminal block (+,-,ignition)
Input	3-pin terminal block (+, -, ignition), +9~36VDC, ATX mode support ignition on/off and delay Power-on/off by M12 connector

Driver Support

Microsoft Windows	FES WES7 (WS7E) / W7 Pro SP1 / WES8 STD / W8.1
Linux	Redhat Enterprise 5, Fedora 14, Linux Kernel 2.6.18 or later

Certification

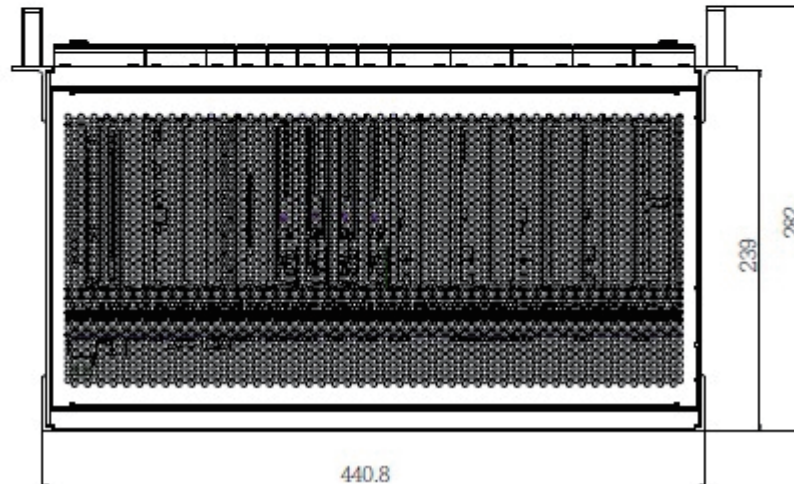
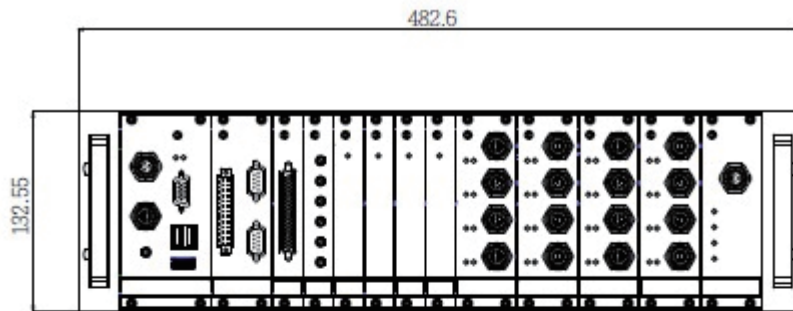
EMC	CE Class A, FCC Class A, RoHS, EN50155
Safety	N/A

Product I/O View



- | | | |
|-------------------|---------------------------|----------------------------|
| A DC Input | D VGA | G Storage module |
| B GbE LAN | E COM ports | H PoE module (M-12) |
| C MIO | F Mini-PCIe module | I PoE Power |

Dimensions 482.6 x 132 x 282 mm (19" x 5.2" x 11.1")



Ordering Information

LVR-8300-A1 Fanless Rolling Stock Computer with Intel® Core™ i5-4422E Processor and QM87

LVR-8300-A2 Fanless Rolling Stock Computer with Intel® Celeron® 2002E Processor and QM87

V.2-2016.3.4