

COMPACT-RSL Rail Series

Embedded Railway Computer with Intel® Atom™ E3800 processor



IPC/COMPACT8

This fan less RPC COMPACT8 generation is based on the Intel® Atom™ E3800 processor technology and offers a wide range of interface options.

The robust and uncompromising industrial design allows the implementation in the most demanding applications and guarantees long term availability.

- 24/7 continuous operation
- M12 connector
- EN50155 Class S2 power supply
- Extended temp. Range
- Railway approved (EN50155 & EN45545)



Product Highlights

- Maintenance free
- Goldcap instead of battery backup
- No moving parts
- Scalable CPU core
- Hardware watchdog
- Temperature supervision
- Intelligent power management system
- ESD- protection on all interfaces
- Long term availability
- Shock and vibration resistant

Product Features

- Intel® Atom™ E3800 Series
- up to 1.91GHz, up to 4 Cores
- RAM soldered on board up to 8GB
- Socket for CFast
- Graphic resolution up to WUXGA
- Ethernet, USB, CAN
- M12 connectors
- Stainless steel housing
- Protection class IP40
- EN50155 certified (Tx Class)

Markets / Applications

- Railway (rolling stock)
- Automotive
- Traffic control
- Transportation and vehicle construction
- Automated Guided Vehicle (AGV)

	Order Code	IPC/RSL8H19-R101E ¹	RSL/RSL8H19-R301E ¹	MySyslogic ¹
Processor / Performance				
Intel Atom E3845 1.91GHz 64-bit		•	•	•
Memory				
L2 cache		1MB	1MB	1MB
DDR3 RAM		4GB	4GB	4GB
8GB DDR3 RAM ¹		optional	optional	optional
Features				
Real time clock PC compatible		•	•	•
Hardware Watchdog		•	•	•
Temperature supervisor		•	•	•
Intelligent power management		•	•	•
Goldcap backup		•	•	•
Communication Interfaces				
DVI-D up to 1920x1200 (WUXGA)		•	•	•
SD Card socket		1	1	1
CFast socket with retention frame ²		1	1	1
SATA 2.0 standard interface ²		optional	optional	optional
USB version 2.0 (Type A)		1	1	1
USB version 2.0 ²		3	3	3
USB version 3.0 (Type A)		1	1	1
Ethernet 10/100/1000 (I210-IT) (M12 female X-coded)		2		up to 2
Ethernet 10/100 (I210-IT) (M12 female d-coded)			2	
RS232 ESD protected (DSUB9)		2	2	up to 6
RS232 ESD protected ²		2	2	
RS422/485 ESD protected (DSUB9)				up to 2
CAN (SJA1000 compatible) ESD protected, isolated (DSUB9)				up to 2
Mini PCIe socket ²		1	1	up to 4
I2C bus ²		•	•	•
HD Audio / Speaker ²		optional	optional	•
Buzzer		•	•	•
Technical Data				
Dimensions w262 x h52 x d138 mm (housing)		•	•	•
Net weight in gram		1750	1750	1750
Input voltage isolated and reverse polarity protected (M12 4P male A-coded)		16.8 ... 45VDC	16.8 ... 45VDC	16.8 ... 45VDC
Input voltage 77 ... 137VDC		optional	optional	optional
Interruption of voltage supply time: EN50155 (>10ms)		Class S2	Class S2	Class S2
Current consumption typ. in mA @ 24V without Add-Ins, idle		~416	~416	~416
Power consumption typ. in Watt @ 24V without Add-Ins, idle		~12	~10	~10
Environmental Conditions				
Operating temperature (up to 85°C for 10 min. according to EN 50155 Class TX) ³		-40°C ... +70°C	-40°C ... +70°C	-40°C ... +70°C
Storage temperature -40 ... +85°C		•	•	•
Protection standard: IP40		•	•	•
Conformal coating		•	•	•
Shock: EN60068-2-27 / EN61373		•	•	•
Vibration: EN60068-2-64 / EN61373		•	•	•
EMI-Conformity EN-50121-3-2		•	•	•
Safety according to EN62368-1		•	•	•
Fire protection: DIN EN 45545-2		•	•	•
Radio and Telecommunication: Designed to meet R&TTE / RED		•	•	•
MTBF ~200 000h (22.8 Years) @ 25°C <small>excluding battery and S2 power supply</small>		•	•	•
Enhancement cards				
Wireless Module (LTE / GPS / WiFi / BT) ¹		optional	optional	optional
Digital I/O				optional

¹ Please contact factory for minimum order quantities

² Internal connector

³ Depending on installation situation and interface connection. Please see user documentation.

Product specifications subject to change without notice. | All data is for information purposes only and not guaranteed for legal purposes. Information in this data sheet has been carefully checked and is believed to be accurate. However, no responsibility is assumed for inaccuracies. Please refer to the user documentation for additional product specification.

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Syslogic Datentechnik AG
Täferstrasse 28
CH-5405 Baden Dättwil

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For further information and support:
info@syslogic.com
support@syslogic.com
www.syslogic.com

+41 56 200 90 40 Switzerland (Headquarters)
+49 7741 967 14 20 Germany and Austria

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industrial computing