

Rugged Computer

## RPC COMPACT- 8 Series

Industrial rugged PC with Intel® Atom™ E3800 processor

Preliminary



Rugged IPC

## RPC/COMPACT8

This fan less RCP COMPACT 8 Series is based on the Intel® Atom™ E3800 (formerly Bay Trail) processor technology and offers a wide range of interface options.

The new ultra rugged housing made of tough anodized aluminum offers a IP67 protection and has no rotating parts.

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

- Multi-core 64-bit Intel® Atom™ processor
- Protection class IP67
- Extended temperature range
- Shock and Vibration resistant

 Windows Embedded  
Standard 7

 Windows IoT



### Product Highlights

- Ultra rugged (IP67)
- Maintenance free
- Goldcap instead of battery backup
- Scalable CPU core
- Watchdog
- Temperature supervision
- 40...+85°C on component level
- Persistent Flash BIOS
- ESD- protection on all interfaces
- No active cooling required
- No moving parts
- Long term availability

### Product Features

- Intel® Atom™ E3800 Series
- Up to 1.91GHz, up to 4 Cores
- RAM soldered on board
- Socket for CFast and SD Card
- Graphic resolution up to SXGA
- Ethernet, USB, RS232, isolated RS422/485
- Isolated CAN, J1939, CANopen
- Rugged M12 connectors
- Rugged aluminum housing
- Protection class IP67

### Markets / Applications

- Heavy Industry
- Traffic control
- Transportation and vehicle construction
- Automated Guided Vehicle (AGV)
- Railway

Processor / Performance			
Intel Atom E3825 1.33GHz 64-bit		•	•
Intel Atom E3845 1.91GHz 64-bit			• optional
Memory			
L2 cache		1MB	2MB
DDR3 RAM		2GB	4GB
8GB DDR3 RAM <sup>1</sup>			optional
Features			
Real time clock PC compatible		•	•
Hardware Watchdog & Temperature supervisor		•	•
Intelligent power management (Ignition controller)		optional	optional
TPM2.0 (SLB9665)		optional	optional
Goldcap backup		optional	optional
Communication Interfaces			
Display port up to 1920x1200 (WUXGA) <sup>1</sup>		•	•
uSD Card socket		optional	optional
CFast socket		1	1
USB version 3.0	(Type A)	1	1
USB version 2.0	(Type A)	1	1
USB version 2.0 <sup>2</sup>		3	3
Ethernet 10/100 Mbit	(M12 female d-coded)	2	2
RS232 ESD protected	(M12 female 8-Pin)	2	2
RS422/485 ESD protected		optional	optional
CAN version 2.0b, SJA1000, ESD protected, isolated	(M12 female 8-Pin)	2	2
Mini PCIe socket <sup>2</sup>		1	1
Digital I/O (24VDC, galv. isolated)		optional	optional
I2C bus <sup>2</sup>		•	•
HD Audio / Speaker <sup>2</sup>		optional	optional
Buzzer		•	•
Technical Data			
Dimensions w276 x h58 x d210 mm (housing, incl. mounting)		•	•
Net weight [gram]		3600	3600
Input Voltage 9...30VDC non-isolated	(M12 4P male A-coded)	•	•
Input voltage 16.8 ... 30DC isolated	(M12 4P male A-coded)	optional	optional
Current consumption typ. [mA] @ 24V without Add-Ins / WiFi		250	300
Power consumption typ. [Watt] @ 24V without Add-Ins / WiFi		6	7.2
Environmental Conditions			
Operating temperature (up to 85°C for 10 min. according to EN 50155 Class TX) <sup>3</sup>		-40°C ... +70°C <sup>3</sup>	-40°C ... +70°C <sup>3</sup>
Storage temperature -40 ... +85°C		•	•
Protection standard: IP67		•	•
Conformal coating		optional	optional
Shock: EN60068-2-27 / EN61373		•	•
Vibration: EN60068-2-64 / EN61373		•	•
EMI-Conformity EN-50121-3-2		•	•
Safety according to EN62368-1		optional	optional
Radio and Telecommunication: Designed to meet R&TTE / RED		•	•
MTBF ~200 000h (22.8 Years) @ 25°C <small>excluding battery</small>		•	•
Wireless Functions			
Cellular Module with dual SIM (GSM/UMTS/LTE) u-blox MPC-L210 Module (TOBY-L210) - M2M only!		2x SMA-RP	2x SMA-RP
Dual SIM Support (eSIM on request)		mini SIM	mini SIM
Positioning Wireless Module (GPS, Galileo, Glonass, Beidou) u-blox NEO-M8U Module incl. acceleration sensor		SMA	SMA
Acceleration / Motion Sensor		•	•
Wireless LAN 802.11a/b/g/n Dual-Band 2T2R mPCIe Module, AR9592		2x SMA	2x SMA

<sup>1</sup> Please contact factory for minimum order quantities<sup>2</sup> Internal connector<sup>3</sup> 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.

© 2018 Syslogic Datentechnik AG  
All rights reserved

Syslogic Datentechnik AG  
Täferstrasse 28  
CH-5405 Baden Dättwil

Version 0.2 | February 2018

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

+41 56 200 90 40 Switzerland (Headquarters)  
+49 7741 9671-420 Germany and Austria

 **syslogic**  
industrial computing