

## RPC COMPACT Railway Series

Embedded Railway Computer with Intel® Atom™ E6x0T processor



## RPC/COMPACT71

This fan less RPC COMPACT71 generation is based on the Intel® Atom™ E6x0T processor technology and offers a wide range of interface options.

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

- 24/7 continuous operation
- M12 connector
- Intelligent power management system
- Full TX Temperature Range
- Railway approved

 Windows Embedded Standard 7

 Windows Embedded Standard 2009



### Product Highlights

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

### Product Features

Intel® Atom™ E6x0T  
up to 1.6GHz  
RAM soldered on board  
Socket for CFast and SD Card  
Graphic resolution up to SXGA  
Ethernet, USB, RS232, isolated RS422/485, CAN  
M12 connectors  
Stainless steel housing  
Protection class IP40  
EN50155 certified

### Markets / Applications

Railway (rolling stock)  
Traffic control  
Transportation and vehicle construction  
Automotive

Processor / Performance			
Intel Atom E680T 1.6GHz			•
Memory			
56 kB L1 cache (32kB instruction / 24kB data)			•
512 kB L2 cache			•
1 GB DDR2-400MT/s SDRAM <sup>1</sup>			optional
2 GB DDR2-400MT/s SDRAM			•
Features			
Real time clock PC compatible			•
Goldcap backup			•
Battery backup <sup>1</sup>			optional
Hardware watchdog (configurable 1.6 ... 257s)			•
Temperature supervisor			•
Intelligent power management <sup>2</sup> see user manual for detailed information			•
Communication Interfaces			
VGA up to 1280x1024 (SXGA)	M12 12P female A-coded		•
FPD Link II	M12 8P male A-coded		optional
SD Card socket <sup>2</sup>			•
CFast socket <sup>2</sup>			•
SATA 2.0 interface standard <sup>2</sup>			•
Mouse / Keyboard interface <sup>1</sup>			optional
USB version 2.0 (host)	Type A	2	up to 4
USB version 2.0 <sup>2</sup>		2	
Ethernet 10/100 (Intel 82574)	M12 4P female D-coded	2	up to 2
RS232 ESD protected	M12 8P male A-coded	1	up to 6
RS422/485 isolated ESD protected	M12 5P male A-coded		up to 2
CAN version 2.0b, SJA1000, ESD protected, isolated	M12 5P female A-coded	2	up to 2
24V Digital Output (current sourcing)	M12 8P male A-coded	2	up to 2
24V Digital Input (current sinking)	M12 8P male A-coded	2	up to 2
PC/104 bus <sup>1,2</sup>			optional
Technical Data			
Dimensions w262 x h52 x d138 mm (housing)			•
Net weight in gram		1750	
Input voltage 9 ... 36VDC isolated and reverse polarity protected	M12 4P male A-coded		•
Current consumption typ. in mA @ 24V without Add-Ins, idle		350	
Power consumption typ. in Watt @ 24V without Add-Ins, idle		8.4	
Environmental Conditions			
Operating temperature (ambient) EN 50155 Class TX -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: IEC / EN60950-1			•
MTBF ~ 200 000h (22.8 Years) @ 25°C			•
Optional enhancement cards			
GPS (u-blox LEA-6N)	QMA female	optional	optional
Quad Band GSM/UMTS (u-blox LISA-U200)	QMA female	optional	optional
WLAN IEEE 802.11a/b/g/n (lesswire WiBear 11n)	QMA female	optional	optional

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