

RGC-PC.2

Computing Module for SMT Systems for Data Acquisition and Processing using the Measuring Software PEA

The Realtime Gateway Controller consists of a full-function PC as well as its connection to the internal SMT system bus. Together with the system software PEA, the RGC-PC.2 is responsible for configuring and controlling all integrated SMT modules.



Integration

The RGC-PC.2 enables full-scale measuring without using a datalogger or separate PC. An external monitor and keyboard are only necessary for system parameterization or if live visualization is desired.

As it is designed for use in vehicles, the processing module has no movable mechanical parts. Data is recorded on the flash memory; central system cooling is responsible for heat dissipation.

Interfaces

The RGC-PC.2 has all important interfaces of a modern PC. This makes it possible to connect standard peripheral devices and, in addition, simplifies integration into existing IT environments. Various removable media can be used to transmit measured data.

Internally, the RGC-PC.2 acts as a central clock source for all SMT modules. This guarantees time-synchronous sampling or reference value output of all IO channels. If required, the system clock can also be fed or emitted via a special interface, which, in combination with other measuring devices or test systems, makes it possible to operate SMT as clock master or clock slave.

SMT - More Than Measuring

The Softing Measurement Technology combines sophisticated measurement technology with signal generation, communication, computing power and memory depth. The unique module concept enables optimal adaptation to the individual application. Apart from standard measurements, SMT is also used in control and regulation, process monitoring and automation, real-time simulation and data logging.



PEA

SMT

µ-Serie

AREAS OF APPLICATION

(TOGETHER WITH MEASURING SOFTWARE)

- System configuration
- Clock synchronization
- Triggering
- Digital signal processing
- Online visualization
- Sequence control / process automation
- Real-time simulation
- Regulation
- Project management
- Data recording

ADVANTAGES

- No external PC / datalogger required
- High degree of compatibility due to standard interfaces and connectors
- No risk of failure of movable parts
- Low power consumption

Technical Data

PC	
Form factor	COM Express Basic Type 2
Processor	Intel® Core™ i7-620UE (2x 1.06 GHz, 4 MB Cache)
RAM	2 GB (DDR3-1066, SODIMM)
Storage media	
Internal	64 GB (1.8", SSD, SATA 3 Gbit/s)
Removable media	USB stick (ports on the front) SD card (slot on the front, max. 32 GB, SDHC)
Interfaces	
VGA	1x standard VGA
LAN	1x Gigabit Ethernet
USB	3x USB 2.0
Audio	1x stereo loudspeaker outlet 1x stereo microphone input
I/O	1x clock input (TTL) 1x relay (changeover contact)
Internal	1x mini PCI EXPRESS® card (half-size) 1x PCI EXPRESS® X1 slot (for specific low-profile cards)
Operating system	
Standard	Windows Embedded Standard 7 incl. SP1 / RTX2011, SP1
Optional	QNX Neutrino RTOS 6.5
Environmental conditions	
Storage	-30 °C ... +85 °C, 10 % ... 90 % rel. humidity, non-condensing
Use	-30 °C ... +70 °C, 10 % ... 90 % rel. humidity, non-condensing

Order Numbers

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