sbc✛
SAIA BURGESS CONTROLS

Saia PCD1.M0160E0
E-Controller

The E-Controller created for the electrical systems is a SBC Function PCD that can be used immediately in the default setting without any programming. Energy meters connected via S-Bus and PCD7.H104SE gateway modules for pulse counters are detected automatically. The applications integrated in the PCD are created with the Saia PG5® Controls Suite. These applications can be adjusted, extended or changed completely as required. With the optional communication interfaces, further protocols and thus data can be integrated. As a result of its electrical switch cabinet-compatible design, this controller is suitable for installation in the electrical cabinet next to the energy meters. Other simple applications, for example in the sub-cabinet as a communication gateway, can also be implemented using the E-Controller.

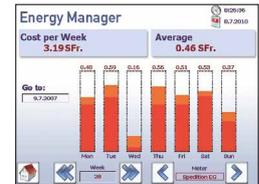## Preconfigured user interface via web browser

SBC Micro Browser APP
Operation and monitoring on iPhone, iPad and Android
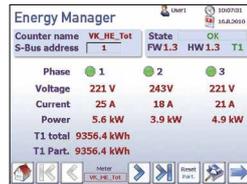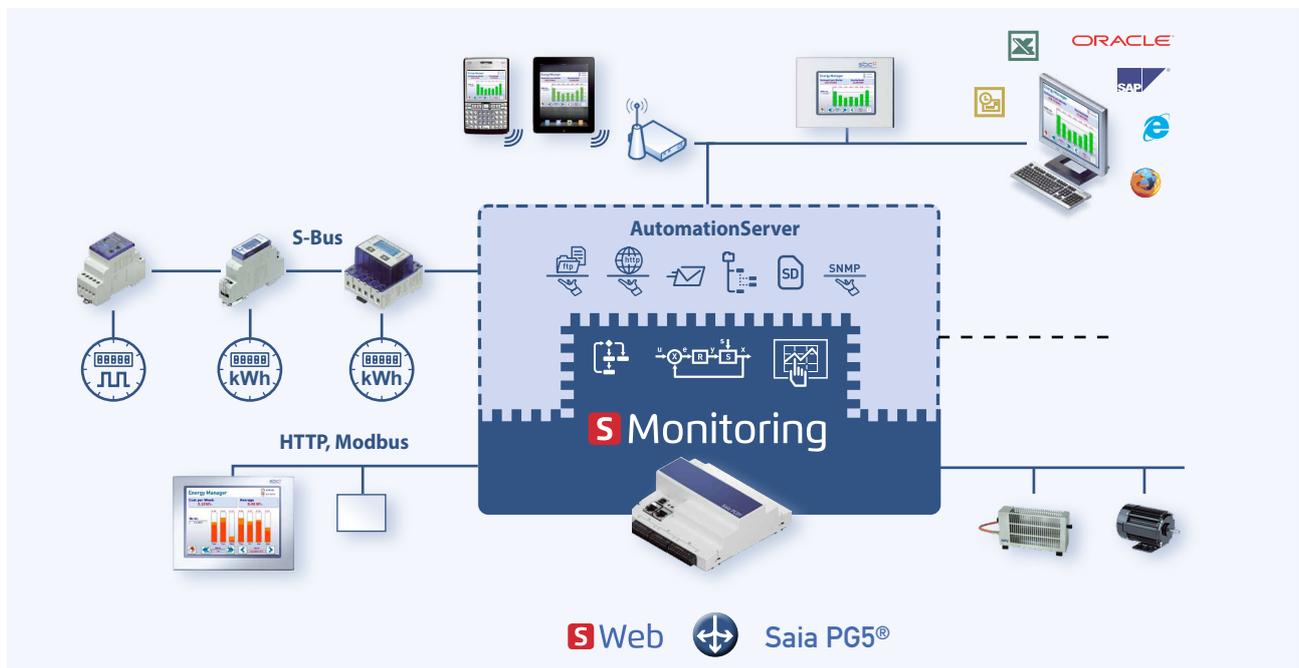

Current meter data

Historical energy data

Overview of costs

The user interfaces can be accessed with a Java-enabled standard browser or, from smartphones, with the Saia Micro-Browser App for Apple and Android.

Function overview

Technical Data

Data storage

Program memory, ROM DB/text	1 MB
Main memory RAM DB/text	1 MB, battery supported
User file system	128 MB on board
Slot (M1) for additional SBC flash card	PCD7.R550M04
Data files	Up to 2,000 files with SBC file system. Download and upload via FTP

General data

Operating system	Saia PCD® Cosinus
Operating voltage	24 VDC, -20/+25% max. incl. 5% ripple (according to EN/IEC 61131-2)
Power consumption	Typically 12 W
Operating temperature	0 to 55 °C
Load carrying ability 5 V/+V(24 V)	Max. 500 mA/200 mA
Battery for data backup (replaceable)	Lithium battery with operating life of 1 to 3 years
Compact dimensions (W × H × D)	142 × 142 × 60 mm
Mounting	DIN rail according to EN60715TH35 (compatible with electrical cabinet) or on a flat surface
Protection class	IP 20

On board I/O data points

6 digital inputs (4 + 2 interrupts)	15 to 30 VDC
2 analogue inputs selectable using DIP switch	-10 to +10 VDC, 0 to +/-20 mA, Pt1000, Ni1000, Ni1000 L&S, 0 to 2.5 kΩ (preconfigured for Ni1000 on delivery)
4 digital outputs	24 VDC max. 0.5 A
1 PWM output	24 VDC max. 0.2 A
4 digital inputs or outputs	24 VDC (preconfigured for digital inputs on delivery)
1 watchdog relay or closing contact	48 VAC or VDC 1 A (mount freewheeling diode over the load when switching DC tension)

Internet and intranet protocols

HTTP server	Visualization with web browser and web panel
FTP server	Simple data exchange
TCP/IP-PPP (Point to Point Protocol)	Efficient communication
SMTP client	Send e-mails with files as attachments (e.g. log files)
DHCP and DNS client	Easy integration in IP networks
SNTP client	Synchronization of internal clock

Communication interfaces

On board interfaces	Ethernet (2 port switch), USB and RS-485	
On board field-level protocols	Serial-S-Bus, Ether-S-Bus and Profi-S-Bus, Modbus RTU or TCP, EIB, M-Bus	
Slot A for optional interfaces	RS-232, RS-422/485 (PCD7.F1xxS)	
Slot M1 for protocol extension	BACnet® Lᴏɴ over IP	(PCD7.R56x module) (PCD7.R58x module)

Programming

Saia PG5® programming software	IL, FUPLA and GRAFTEC (as of PG5 Version 2.1.xx)

Ordering information

Type	Description
PCD1.M0160E0	E-controller with SBC S-Monitoring functions

General data