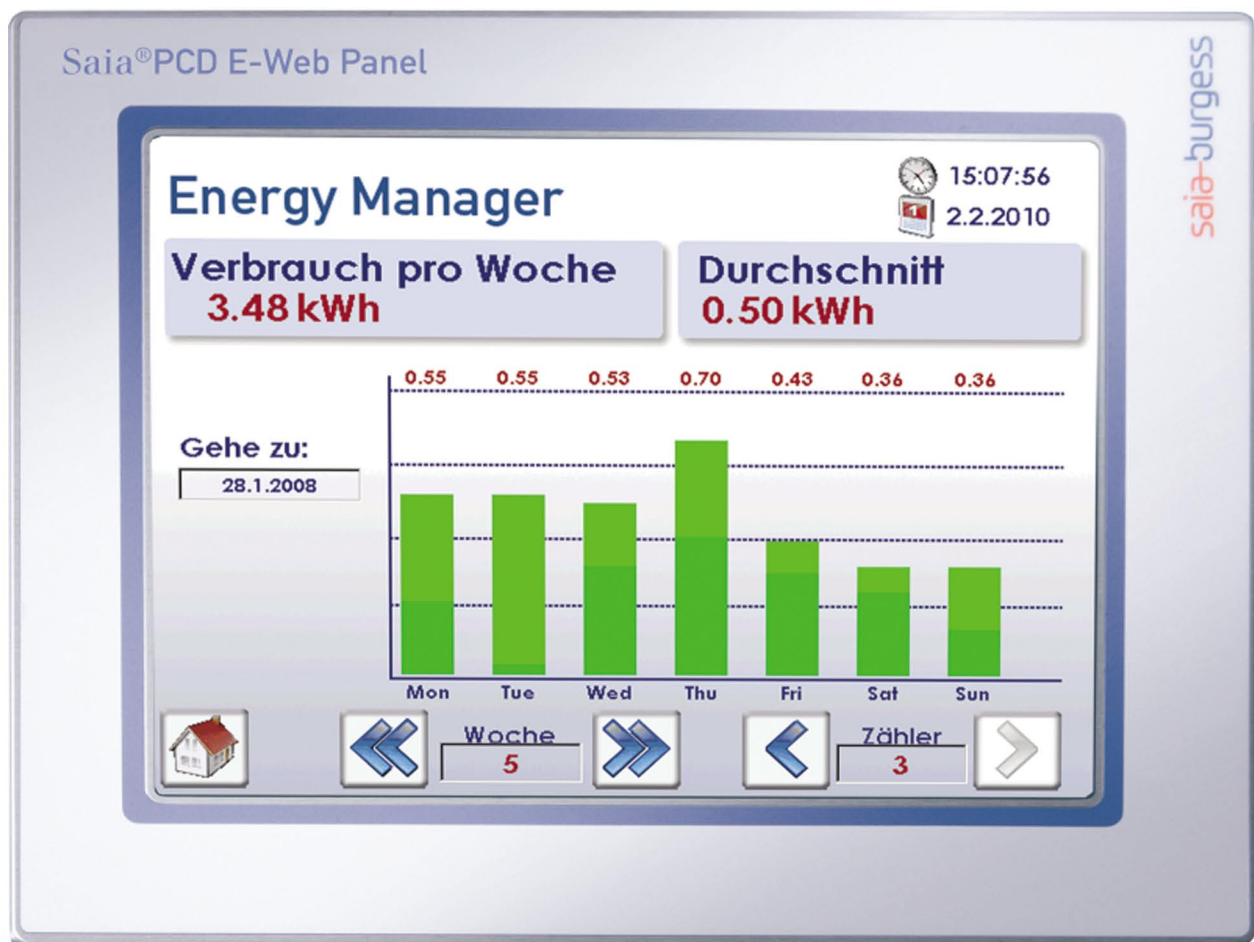


Saia® PCD7D system Web Panel MB, Energy Manager



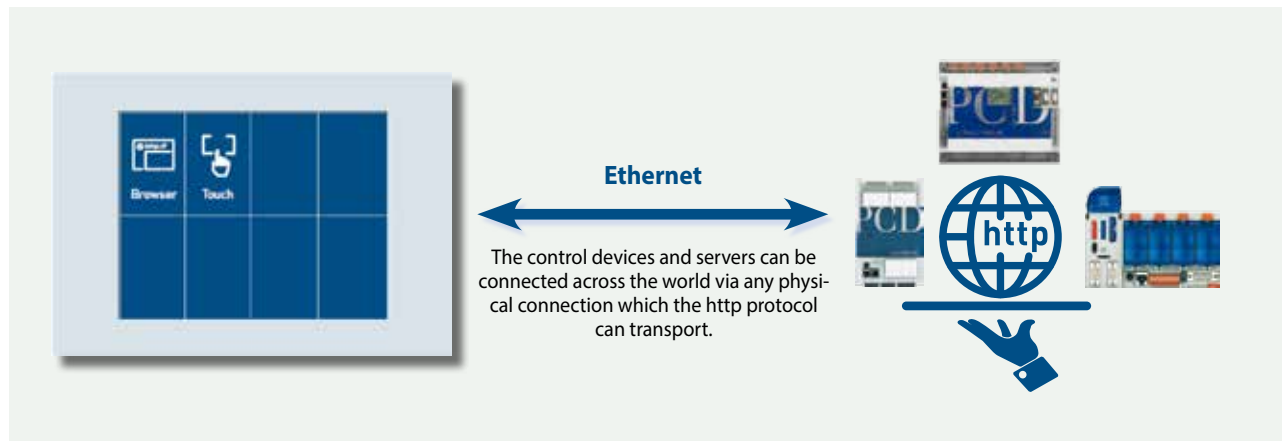
Malthe Winje

08-594 118 30 www.mwa.se info@mwa.se

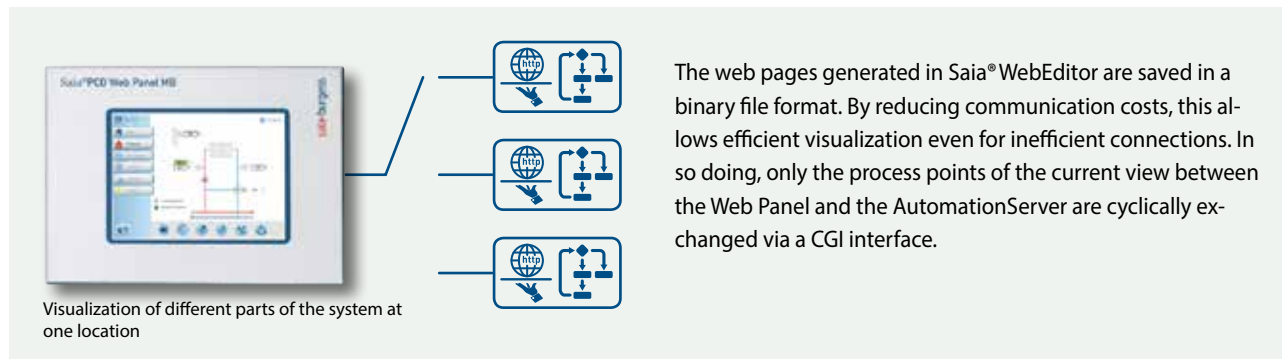
2.2 Saia® Web Panel MB | Web technology

Combination of openness, world standards and universality

A system for operation/monitoring with web technology consists of essentially just two functional elements: a web server and a browser. The protocol linking them is http. These two functional elements can be combined in the same automation device or can be located on opposite sides of the globe.



The operation/monitoring project is created once using Saia® WebEditor and saved to the associated web server. Every browser can freely access any web server of the automation devices recognized in the network and run its Web-HMI application. A web server can handle multiple browsers at the same time. Web-HMI eliminates complex engineering, duplication of project expenses, software licensing problems and system breaks during operation/monitoring.



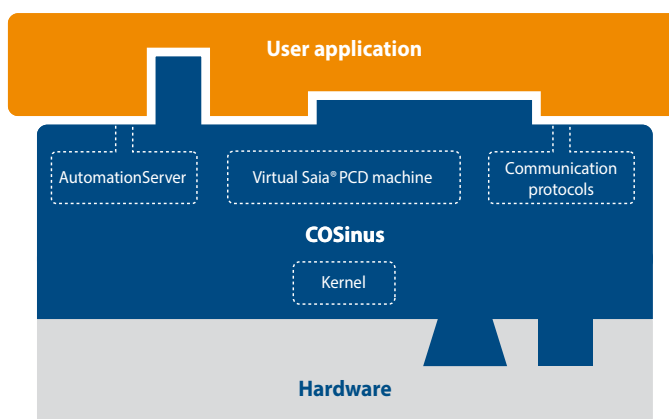
Saia® COSinus



Systems are often extended or fitted with new functions and must be maintained throughout their entire lifecycle. The Saia® COSinus operating system was specially developed from scratch in-house for use in automation environments. It is therefore possible to ensure the industrial

lifecycle without being pushed by large market-influencing companies. The top priority for Saia® COSinus is reliable and continuous operation.

The Saia® Micro-Browser Panel series are essentially based precisely on this reliable system which has been expanded with the Micro-Browser application. This allows the visualization and operation of web projects which have been created with Saia® WebEditor. Here, the visualization project can be saved locally or on a remote server.



2.5 Saia® Web Panel MB | Functional HMI

By default, Saia® Functional HMIs, such as the S-Energy Manager, are supplied with application software which is functional without any additional programming. The basic functionality is already included in this software and significantly shortens the in-house development cycle. Functional expansions and changes to functional HMI can be performed at any time using standard programming tools.

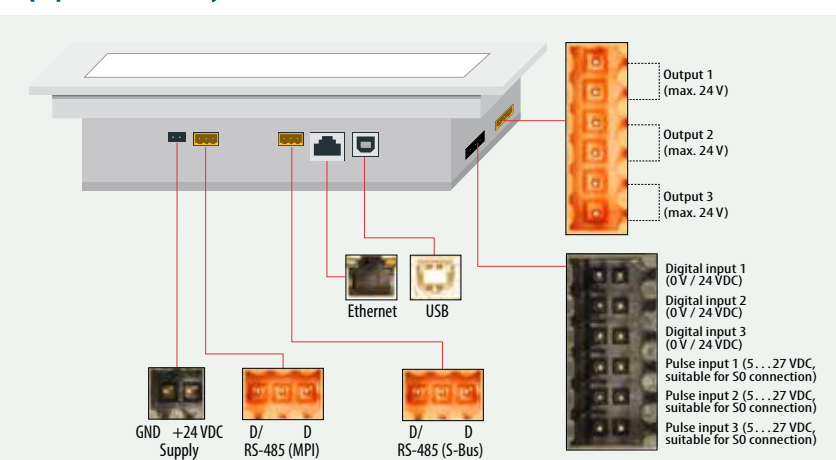


Webcode
scen13090

S-Energy Manager: Measuring, archiving, displaying and communicating consumption data

The S-Energy Manager combines data capture, visualization and logging in one compact control panel. The default user interface is produced with the standard Saia® S-Web Editor tool and can be modified or enhanced as required. Historical and current data (CSV/Excel files) and the web visualization can be accessed from anywhere via the integrated AutomationServer using FTP and HTTP. Up to 128 single and three-phase bus-coupled energy meters can be connected to the S-Energy Manager control panel. With the integrated Step7® programmable logic controller from Siemens, simple control functions, tailored to the individual application, can be developed such as peak load cut-out or alarming via e-mail.

Equipment assembly

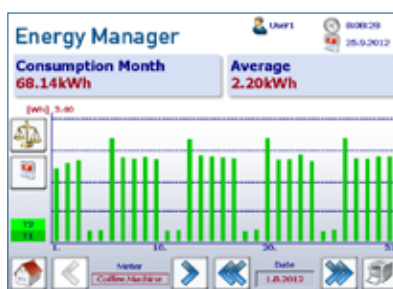


Main characteristics

- ▶ Logging the energy data in CSV files
- ▶ 1 GByte SD flash card
- ▶ Digital inputs/outputs
- ▶ Integrated real-time clock & battery
- ▶ Supports up to 128 energy meters
- ▶ Programmable in Step7® from Siemens



Current meter data

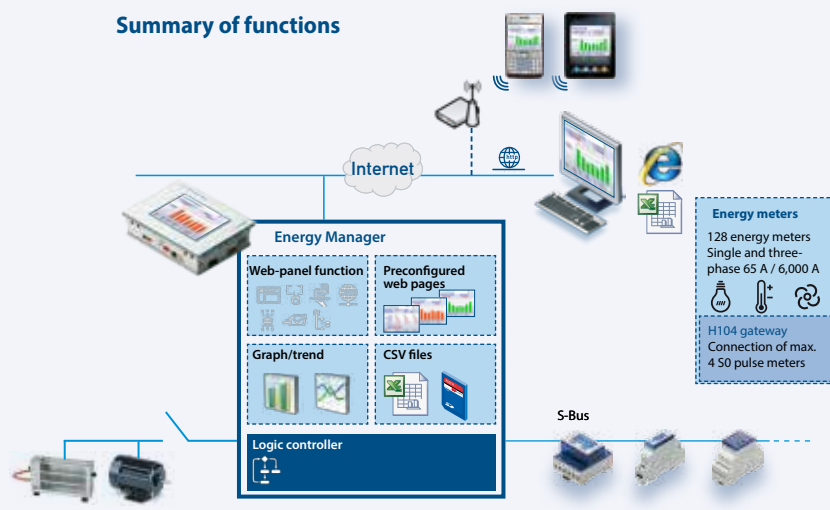


Historical energy data



Overview of costs

Summary of functions

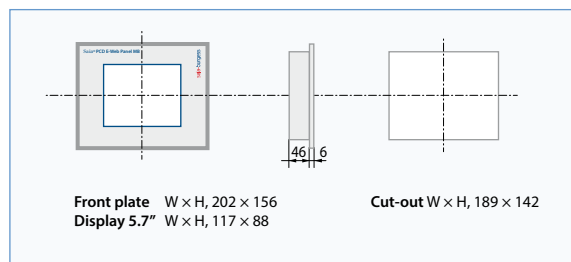


Functional scope

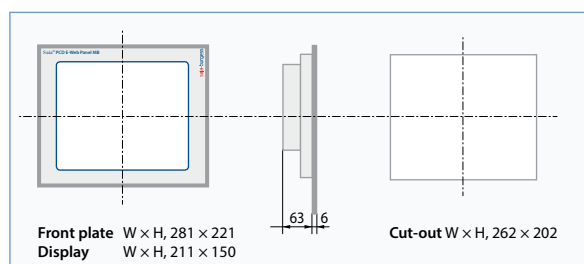
- Comparison between meters and periods
- Connection of bidirectional meters
- Connection of H104SE coupler modules (for S0 meters)
- 15 min energy control (E_{\max} load dumping)
- Automated data and alarm e-mail

Dimensions (W × H × D) and cut-out (W × H), [mm]

PCD7.D457ET7F



PCD7.D410ET7F



Saia® Energy Manager App

Monitoring energy with iPhone and iPad

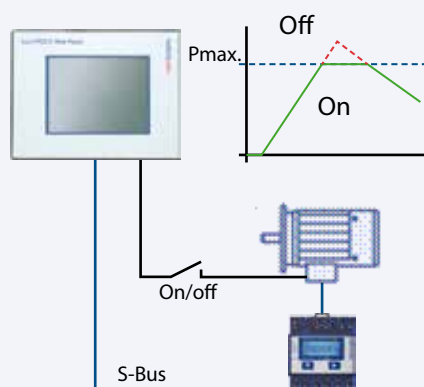


Energy
Manager
App



Application example

The average output over 15 minutes can be restricted automatically using the load dumping function.



Technical data

User interface

Technology	Predefined web pages, produced with Saia® WebEditor
Displaying consumption values	Current energy meter data Current and historical data recording of daily, weekly, monthly values Cost display by day, week, month or year

Inputs and outputs

Inputs	3× inputs for 24 VDC signal capture 3× inputs for pulse signal capture
Outputs	3 relay outputs with switching contacts 24 V / 1 A Switching capacity: typically 200 mW at 12 VDC
Field level protocols	Ether-S-Bus Server / Modbus
Internet services	Saia® Micro-Browser, AutomationServer

Interfaces

Ethernet 10/100 M	1× RJ-45
USB 12 M	1× client
Serial	1× RS-485 S-Bus, 1× RS-485 MPI
Temperature range	Operation: typically 0...50 °C Storage: -20...+70°C
Humidity	Operation: 10...80 % Storage: 10...98 %, non-condensing
Processor	Coldfire CT 5272; 66 MHz
Battery	Lithium Renata CR 2032 (lifetime of 1...3 years)
Real-time clock (RTC)	Yes, battery backup
SD card	On-board 1 GByte
PLC software	STEP7® from Siemens (up to 1,024 flags, 256 FC, 256 FB, 512 DB)



PCD7.D457ET7F



PCD7.D410ET7F

Display size	5.7" TFT	10.4" TFT
Resolution (pixels)	VGA 640×480	
Touch screen	Resistive touch screen	
Contrast adjustment	Yes	
Background lighting	LED	
Power supply	24 VDC ±20 %	
Current draw	max. 500 mA	max. 600 mA
Protection class (front)	IP 65	

2.6 Accessories for Micro-Browser Panels

The right mounting kit for all Web-HMI devices

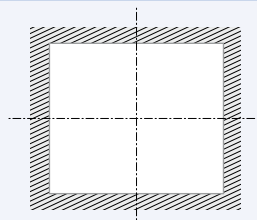
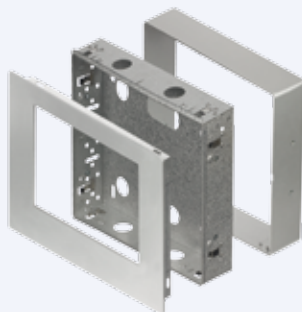
The Micro-Browser Panel series not only fits in a switch cabinet but, using industrial in-wall and off-wall mounting kits, enables this modern technology to be easily and properly integrated into the area in close proximity to the user as well. The mounting kits therefore enable simple wall mounting, which is consistently available for all panels. This minimizes logistic and mounting costs.

5.7 inch

In-wall mounting PCD7.D457-IWS2*)



On-wall mounting PCD7.D457-OWS2*)



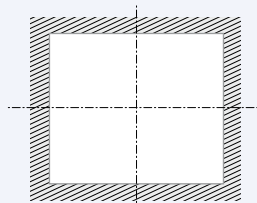
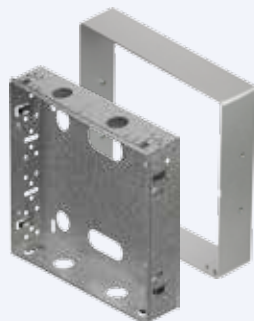
Cut-out B × H, 270 × 211
Minimum depth
 For solid walls 75 mm
 For cavity walls 65 mm

10.4 inch

In-wall mounting PCD7.D410-IWS



On-wall mounting PCD7.D410-OWS



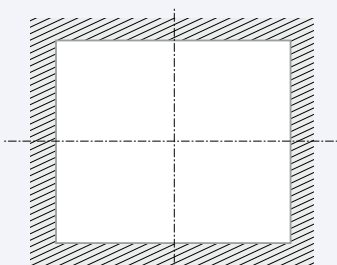
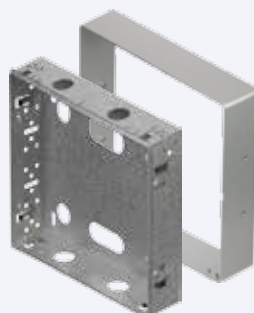
Cut-out B × H, 270 × 211
Minimum depth
 For solid walls 75 mm
 For cavity walls 65 mm

12.2 inch

In-wall mounting PCD7.D412-IWS



On-wall mounting PCD7.D412-OWS



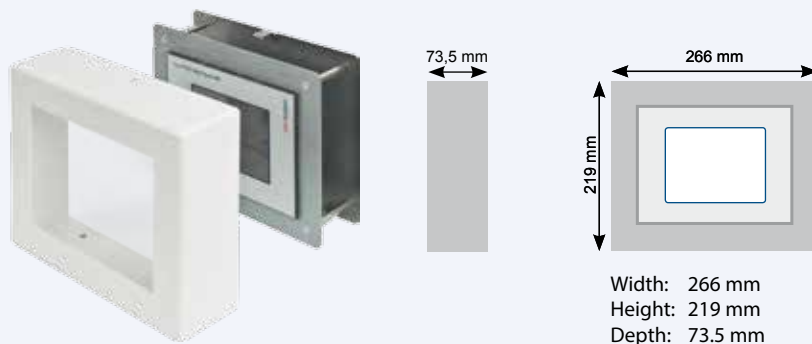
Cut-out B × H, 309 × 245
Minimum depth
 For solid walls 75 mm
 For cavity walls 65 mm

*)In preparation, see chapter C2 «Product status»

On-wall mounting kit 5.7 inch

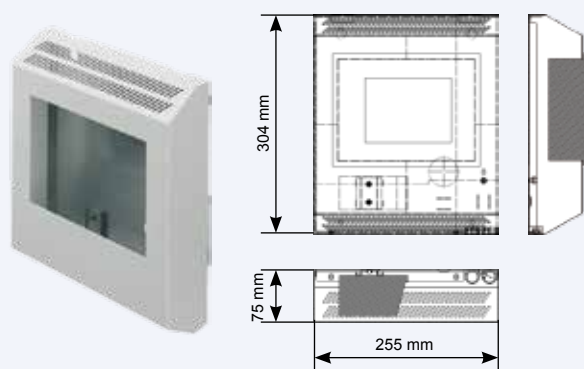
On-wall mounting

PCD7.D457-OWS



Wall mounting kit 5.7 inch

PCD7.D457-OWS1



Energy Manager wall mounting set 5.7 inch

Q.OWS-7DET7F-1



The Energy Manager package includes

- ▶ Wall mounting kit 5.7 inch PCD7.D457-OWS1
- ▶ S-Energy Manager 5.7 inch PCD7.D457ET7F
- ▶ Power pack 24 VDC Q.PS-AD2-2402F

OEM or proprietary design

The standard 5.7 inch Micro-Browser Panel without a front panel offers room for individual creativity. Whether it's for modern rooms or rustic spaces with customer-specific front screens designed in aluminum, black or wood, this modern technology can be easily and unobtrusively integrated into a sophisticated space.



Panel with aluminum front: PCD7.D457VTCZ33
 Panel with black front: PCD7.D457VTCZ35
 Panel with mirror-effect front: PCD7.D457VTCZ36
 Panel with neutral film: PCD7.D457VTCZ11



YouTube



Video
 In-wall mounting
 Webcode scen13093a



YouTube



Video
 On-wall mounting
 Webcode scen13093b

