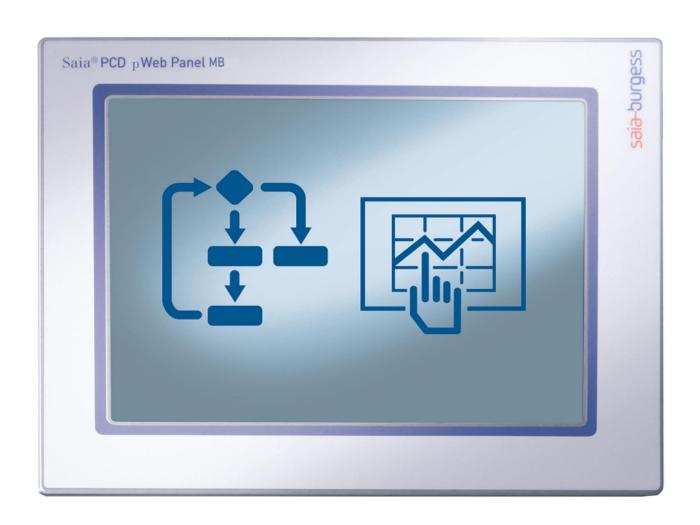


Saia® PCD7D system Web Panel MB med PLC&HMI.

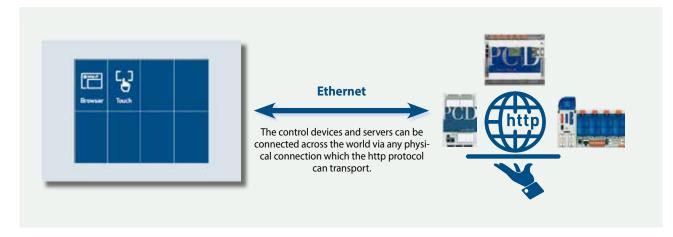




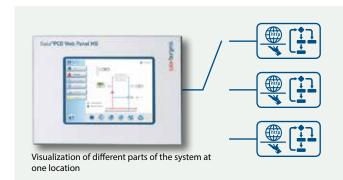
2.2 Saia® Web Panel MB | Web technology

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.



The web pages generated in Saia® WebEditor are saved in a binary file format. By reducing communication costs, this allows efficient visualization even for inefficient connections. In so doing, only the process points of the current view between the Web Panel and the AutomationServer are cyclically exchanged via a CGI interface.

User application

Virtual Saia® PCD machine

COSinus

Kernel

Hardware

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

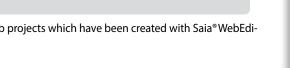
lifecycle without being pushed by large market-influencing companies. The top priority for Saia® COSinus is reliable and continuous operation.

The Saia® Micro-Browser Panel series are essentially based pre-

cisely 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.

AutomationServe



Communication

protocols

2.4 Saia® pWeb-Panel MB

In addition to the functions of the standard MB panel, a programmable logic controller is integrated into the pWeb-Panels. Based on the COSinus operating system of the Saia® PCD, specific, complex control logic and local data processing logic can be implemented in one device. The priority here is the operating and visualization functions so that small control systems can also be implemented. The control functions have a lower priority.



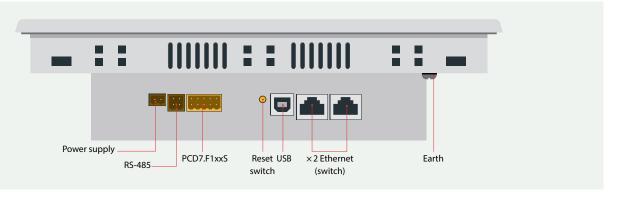
Webcode scen13088

Main characteristics

- ▶ 2× Ethernet interfaces (switch)
- ▶ RS-485 interface
- ▶ 240 MHz processing power
- ▶ Expandable via PCD7.F1xxS modules
- ▶ Usable as RIO master



Installation

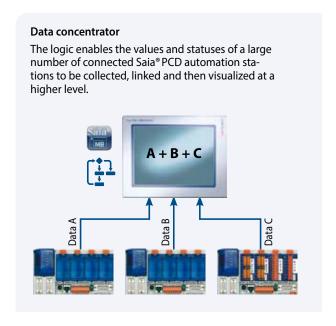


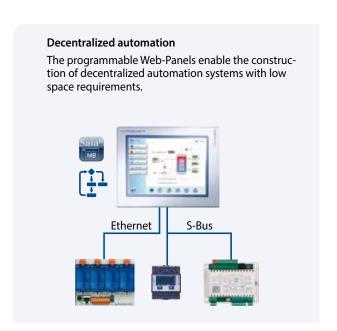


The high priority given to visualization in the program workflow offers the best basis displaying data from various devices. In addition, simple control tasks can be implemented directly in the panel.

A Saia® PCD is recommended for controls and time-critical controllers.

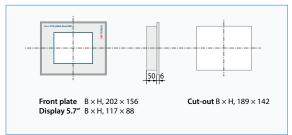
Application examples



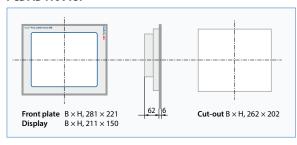


Dimensions (W \times H \times D) and cut-out (B \times H) mm

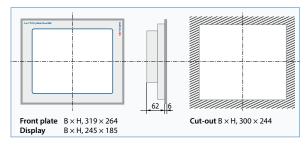
PCD7.D457VT5F



PCD7.D410VT5F



PCD7.D412DT5F



Logic controller

| Operating system: | Saia® COSinus with Micro-Browser extensions | |
|------------------------------|---|--|
| Protection class | IP65 | |
| User program, ROM/DB/Text | 1 MByte | |
| RAM/DB/Text | 1 MByte | |
| Media | 16,384 flags / 16,384 registers | |
| Backup for users | The user program is saved on the integrated microSD card | |
| File system for users | 128 MByte onboard | |
| Program cycle time | 10 cycles/sec. maximum | |
| Protocols at field level | Serial-S-Bus, Ether-S-Bus, Ether-S-IO, Modbus RTU or TCP | |
| Internet services | Saia® Micro-Browser, AutomationServer | |

Interfaces

| Ethernet | 2× RJ-45 (Switch) | |
|-----------------------|--|--|
| USB | 1×(1.1/2.0) | |
| Serial interfaces | RS-485 1 slot for PCD7.F1xxS | |
| Temperature range | Operation: 0 50 °C (typically) Storage: −20 70 °C | |
| Humidity | Operation: 10 80%, Storage: 10 98%, non-condensing | |
| Processor | Coldfire CF5373L 240Mhz | |
| Battery | Lithium Renata CR 2032 (lifetime of 13 years) | |
| Real-time clock (RTC) | through battery backup | |

| Technical data | PCD7.D457VT5F | PCD7.D410VT5F | PCD7.D412DT5F |
|---------------------|------------------------|------------------------|------------------------|
| Display size | 5.7"TFT | 10.4"TFT | 12.1″TFT |
| Resolution (pixels) | VGA 640×480 | VGA 640×480 | SVGA 800×600 |
| Touch screen | Resistive touch screen | Resistive touch screen | Resistive touch screen |
| Contrast adjustment | Yes | Yes | Yes |
| Background lighting | LED | LED | LED |
| Power supply | 24 VDC ±20 % | 24 VDC ±20% | 24 VDC ±20 % |
| Current draw | max. 500 mA | max. 500 mA | max. 600 mA |
| Status front LED | | | Yes |

Communication

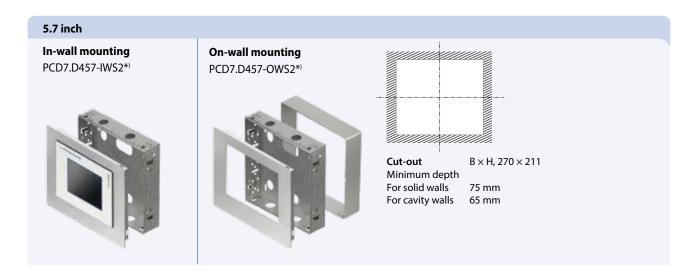
The Saia® pWeb Panel MB units can be expanded with one slot for PCD7.Fxxx modules or PCD7.Rxxx modules with various communication and memory modules.

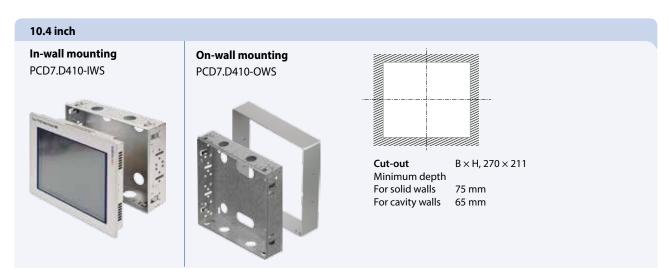
The modules are described in the section "1.4 Saia® PCD1 series".

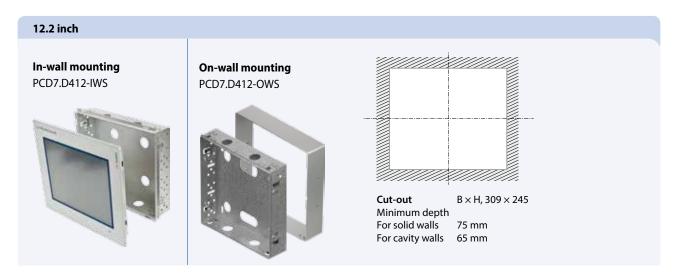
2.6 Accessories for Micro-Browser Panels

The right mounting kit for all Web-HMI devices

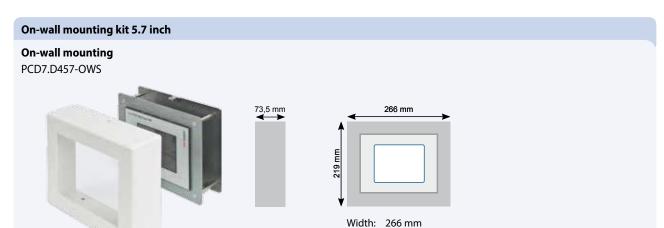
The Micro-Browser Panel series not only fits in a switch cabinet but, using industrial in-wall and off-wall mounting kits, enables this modern technology to be easily and properly integrated into the area in close proximity to the user as well. The mounting kits therefore enable simple wall mounting,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



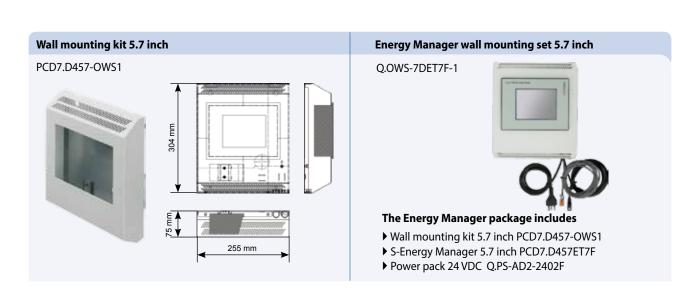




^{*}In preparation, see chapter C2 «Product status»

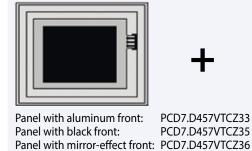


Height: 219 mm Depth: 73.5 mm

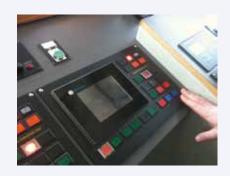


OEM or proprietary design

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 neutral film:





