

Product Information

S7-Panel-PLC

PC709P



(valid from PLC version PC709P-xxx-**03**)

Changes to older versions of this document

Rev. 02 → **03**: description of Profibus-signals made compatible to Siemens-manuals

Rev. 03 → **04**: new front foil, new images, new design line, connectors added

Description

Panel-PLC with TFT-color touch display

- **PC709P** 7" TFT
(800x480 Pixel/ WVGA)

Standard configuration:

- **RS232 with**
 - free ASCII-protocol
- **RS485 with**
 - free ASCII-protocol
 - Modbus RTU
 - with switchable terminate resistors for RS485
- **Ethernet with**
 - RFC1006,
 - Send/ Receive via TCP and UDP,
 - Modbus TCP
- **CAN with**
 - protocol compatible to CANopen®
 - layer2-communication
 - with switchable terminate resistors for CAN

• **Micro-SD-slot**
- for SD-cards up to 8 GByte

• **Run/Stop-switch**

• **Status LEDs** for Power, Battery, Error, Run

• **Inserting stripes** for Logo and identification (thereby customized adaption possible easy)

optional configuration:

- (optional)
- **Profibus DP-Master**
- **Profibus DP-Slave**
- with switchable terminate resistors for Profibus

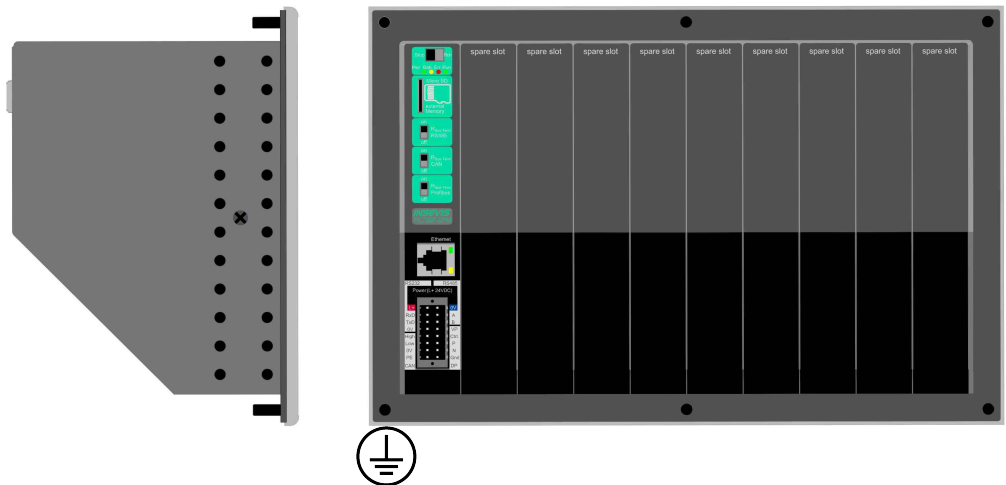


Figure above: Panel-PLCs PC709P, rear view and view from the side

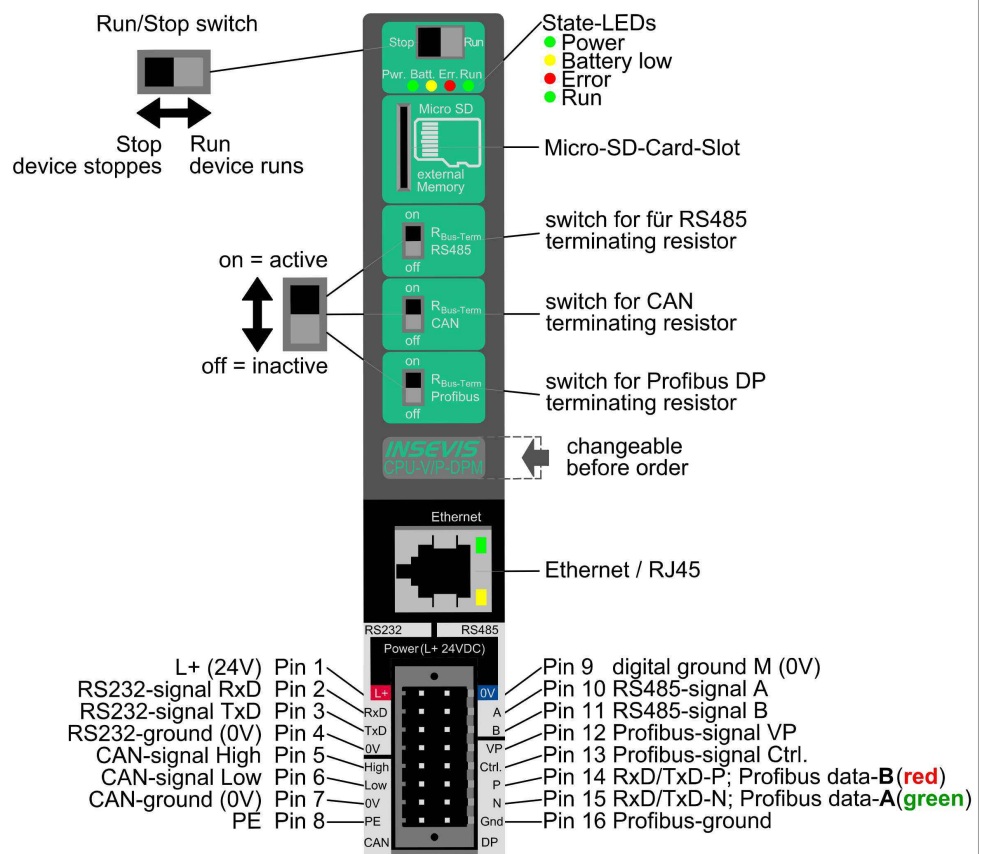


Figure above: Identification of all CPUs of all Panel-PLCs basic devices with CPUs of type V or P and with Profibus DP Master

Technical data	Device
Dimensions W x H x D (mm) Cut out W x H (mm) Weight	182 x 140 x 95 163 x 118 ca. 800 g
Operating temperature range Storage temperature range	-20°C ... +60°C (without condensation) -30°C ... +80°C
IP-protection class front panel rear side	IP65 IP41
Connection technology	connector with pin-marked pushers and 2 lift-arms or 2x bolt flanges on side (cage clamp technology) for cross sections up to max. 1,5mm ²
Load voltage L+	24V DC (11 V ... 30V DC)
Current consumption Power dissipation	100mA ... 750mA 3W(typ.) 10W(max.)
Start-up current	< 3A
Diagonal of display (inch) Display resolution (pixel)	7" (178mm) 800x480 Pixel (WVGA)
Display unit Operating unit	TFT display with 16Bit colours analog resistive touch screen
Visualization software Reference unit	VisuStage PC700
Technical data	CPUs
CPU-type	Type P (PC709P)
Working memory = battery backed load memory Diagnostic buffer	640kB, thereof 384 kByte remanent data 100 messages (all remanent)
Flash internal for visualization external memory card	24 MByte Micro SD, up to max. 8 GByte (not necessary for operation)
OB, FC, FB, DB Lokal data Number of in- and outputs Process image Number of Merkerbytes Number of Taktmerker Number of timer, counter Depth of nesting	each 1.024 32kByte (2kByte per block) in each case 2.048 Byte (16.384 Bit) addressable in each case 2.048 Byte (default set is 128 Byte) 2.048 (remanence adjustable, default set is 0..15) 8 (1 Merkerbyte) in each case 256 (each remanence adjustable, default set is 0) up to 16 code blocks
Real-time clock elapsed hour counter	yes (accumulator-backed hardware clock) 1 (32Bit, resolution 1h)
Program language Program system	STEP 7® - AWL, KOP, FUP, S7-SCL, S7-Graph from SIEMENS SIMATIC® Manager from SIEMENS or compatible products
Operating system Program unit to reference	compatible to S7-300® from SIEMENS CPU 315-2PN DP
Serial interfaces (protocols)	COM1: RS 232 (free ASCII) COM2: RS 485 (free ASCII, Modbus-RTU)
Ethernet (protocols)	Ethernet: 10/100 Mbit with CP343 functionality (RFC1006, TCP, UDP, Modbus-TCP)
CAN (protocols)	CAN-Telegrams (Layer 2), compatible to CANopen® MasterSlave 10 kBaud ... 1 MBaud
Profibus (protocols)	Profibus DP V0 master/ slave 9,6kBaud ... 12 MBaud
Onboard periphery	7 free slots for INSEVIS periphery modules
Decentral periphery	- INSEVIS- Periphery (with automatic configuration via „ConfigStage“) - all CANopen® slaves according to DS401 - all Profibus DP-V0-slaves - diverse external periphery families

Control panel cut out

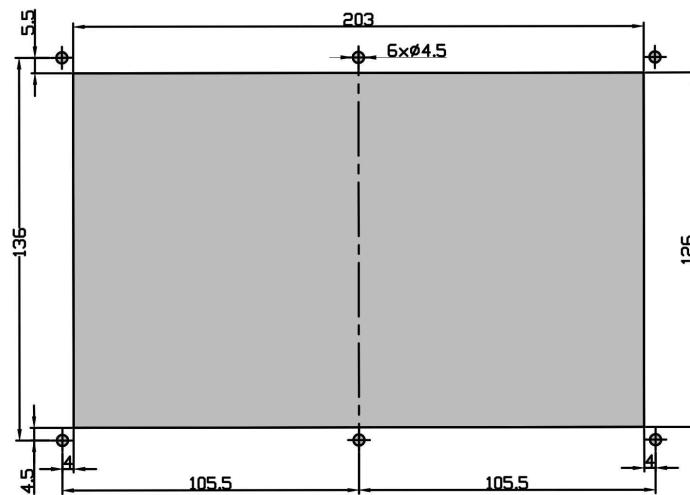
Dimensions

Cut out
W x H (mm) 163 x 118
6 holes with D 4,5mm

Mounting depth
ca. 95mm max.

Wiring outlet
- 45° to the bottom
rear view and
horizontal mounting)

- 45° to the left
(rear view and
vertical mounting)



Drill jig

An 1:1 pattern as drill jig is available as PDF at INSEVIS web site for this product
Print it 1:1 and use it for marking the cut out.

Ordering data devices

Identification	Standard	with Profibus DP Master	with Profibus DP Slave
S7-Panel-PLC PC709P	PC709P-0-03	PC709P-DPM-03	PC709P-DPS-03

Ordering data accessoires

Identification / Order-No.	Identification / Order-No.
Periphery module DI16 / PM-DI16-02	Periphery module MIO84 / PM-MIO84-02
Periphery module DIO16 / PM-DIO16-02	Periphery module AI8O2 / PM-AI8O2-02
Periphery module DO-4R / PM-DO4R-02	Periphery module AI4O4 / PM-AI4O4-02
Functional module DIO8-Z (configurations reg. catalog)	Periphery module RTD8O2 / PM-RTD8O2-02
Connector 2x8pin (for PLC) / E-CON(S)16-00	Connector 1x8pin (for DO4R) / E-CON8-00
Connector 2x10pin (for digital PM) / E-CON(S)20D-00	Mounting / grounding set for 5,7" / 7"-devices * / E-MNT57-00 (PU10 pcs.)
Connector 2x10pin (for analog PM) / E-CON(S)20A-00	Profibus-adapter for 12MBaud-nets / E-AD-DP12
OEM-Firmware with customized logo included / SW-BS-OEM	OEM-Inserting stripe V for logo and identification for rear side (PU100)
Micro SD-card 1/2/4/8GB (ext. memory) / E-MSD1/2/4/8-00	

* (part of the first deliuvry already)

Qualified personnel

All devices described in this manual may only be used, built up and operated together with this documentation. Installation, initiation and operation of these devices might only be done by instructed personnel with certified skills, who can prove their ability to install and initiate electrical and mechanical devices, systems and current circuits in a generally accepted and admitted standard.

Manuals, sample programs

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