

# Product Information S7-Panel-PLC PC709P





(valid from PLC version PC709P-xxx-03)

Changes to older versions of this document

 $Rev.~02 \rightarrow 03:$  description of Profibus-signals made compatible to Siemens-manuals  $Rev.~03 \rightarrow 04:$  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<sup>®</sup>
- 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

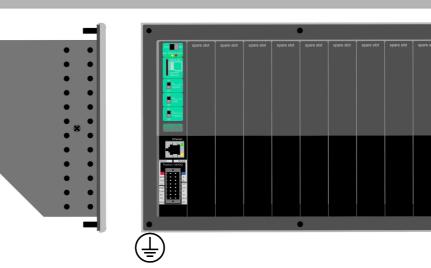
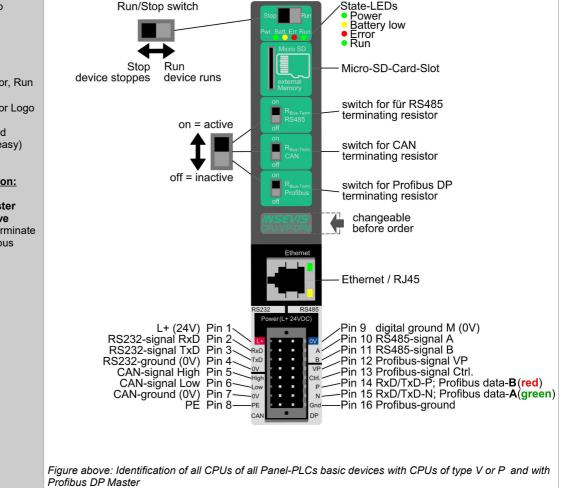


Figure above: Panel-PLCs PC709P, rear view and view from the side



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# INSEVIS

Technical data	Device	
Dimensions W x H x D (mm) Cut out W x H (mm) Weight	222 x 147 x 95 203 x 126 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 <sup>2</sup>	
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 resisitive touch screen	
Visualization software Reference unit	VisuStage PC700	
Technical data	CPUs	
CPU-type	<b>Type P</b> (PC709 <b>P</b> )	
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 015) 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 <sup>®</sup> - 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 <sup>®</sup> from SIEMENS CPU 315-2PNDP	
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 <sup>®</sup> slaves according to DS401 - all Profibus DP-V0-slaves - diverse external periphery families	

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### Control panel cut out Dimensions 203 6xø4.5 . Cut out W x H (mm) 163 x 118 6 holes with D 4,5mm Mounting depth ca. 95mm max. Wiring outlet č ĸ - 45° to the bottom rear view and horizontal mounting) - 45° to the left (rear view and vertical mounting) 105.5 An 1:1 pattern as drill jig is available as PDF at INSEVIS web site for this product **Drill jig** 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 <b>DI16</b> / PM-DI16-02	Periphery module MIO84 / PM-MIO84-02
Periphery module <b>DIO16 /</b> PM-DIO16-02	Periphery module AI8O2 / PM-AI8O2-02
Periphery module <b>DO-4R /</b> PM-DO4R-02	Periphery module AI4O4 / PM-AI4O4-02
Functional module <b>DIO8-Z</b> (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 deliuvery 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

Additional documentation by manuals is available as well sample applications at the download area of www.insevis.com in English language for free download.

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