Product information

S7-Panel-PLC

PC710T

Image of PC710T without Profinet (PC710T-0-03)

Image of PC710T with Profinet (PC710T-PNC-02)

(valid from PLC-version PC710T-xxx-**02**)

Changes to older versions of this document

Rev. 01 → 02: new images, new design line, connectors added, drill jig info added
Rev. 02 → 03: changed to CPU-T slim version
Rev. 03 → 04: Information for disposal of old equipment

Description

S7-Panel-PLC with

- 7" TFT display
  (800x480 pixel)
- resistive touch
  (front protection class IP65)

Standard configuration:

RS232 with
- free ASCII protocol

RS485 with
- free ASCII protocol
- Modbus RTU
- with switchable teminate
  resistors for RS485

**2x Ethernet (as switch
  or separated) with**
- S7-connection (Put/Get)
- Send/ Receive via
  TCP and UDP,
- Modbus TCP

CAN
- protocol compatible to
  - CANopen®
  - Layer2 communication
- with switchable teminate
  resistors for RS485

Micro-SD-card slot
- for SD-cards up to
  8GByte

Run/Stop switch

State LEDs for
  Power, Battery, Error, Run

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

Additional configuration:
  (only for PC710T-PNC-02)

Profinet IO Controller

Scope of delivery:
- Mounting kit with
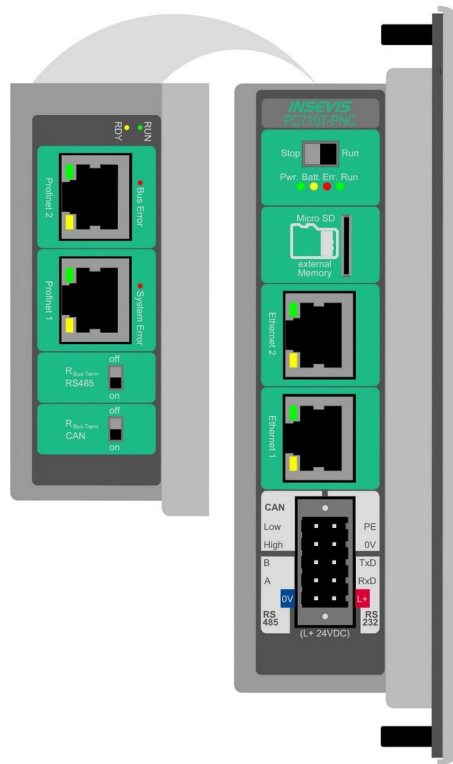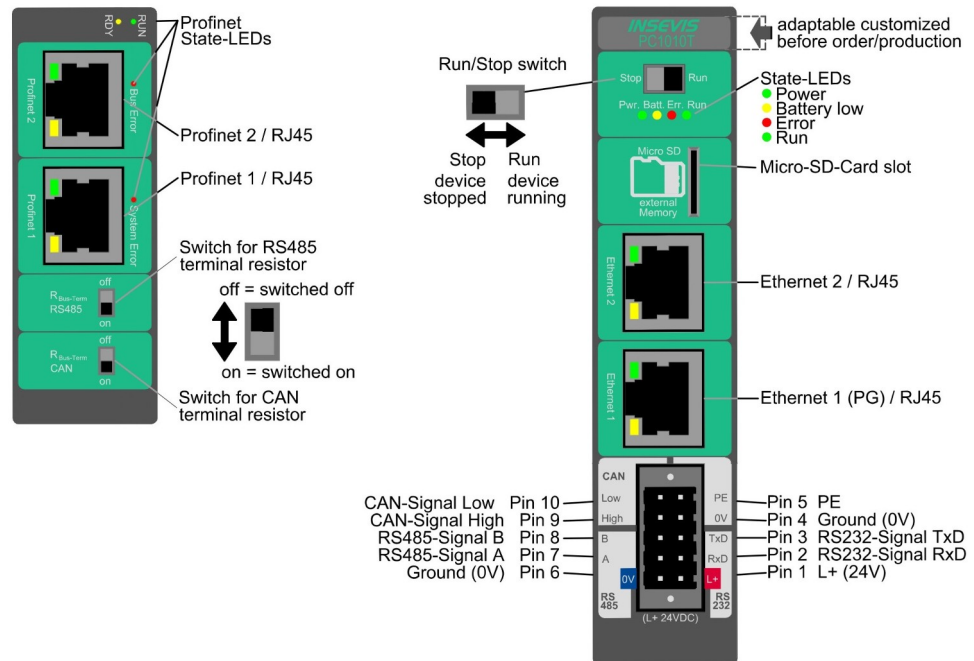 grounding terminal i
- Technical data sheet

Figure above: View to rear side and connections sides of PC710T-PNC

Figure below: CPU-connections of all Panel-PLC-basic devices (without periphery slots) with CPUs type T and with option Profinet IO Controller

→ **Interfaces are shifted a little bit among each other at the version PC710T-0-03, but functions and connections are kept similar to the other CPU-T versions (no image, self explanatory)**

Technical data

Dimensions W x H x D (mm) Cut out W x H (mm) | Weight	222 x 147 x 50 (45 mounting depth) 203 x 126 | ca. 700g
Operating temperature range Storage temperature range Relative humidity	-20°C ... +60°C (without condensation) -30°C ... +80°C up to 96% (without condensation)
IP-protection class Vibrations	front panel IP65 | rear side IP41 Frequency range 2 -100Hz, amplitude 1mm peak < 13,2Hz acceleration 0,7g >13,2Hz
Connection technology	removable connector with 2 bolt flanges (cage clamp technology) for cross section up to max. 1,5mm^2
Load voltage L+	24V DC (11 V ... 30V DC)
Current consumption Power dissipation	150mA ... 300mA 4W (typ.) ... 7,5W (with Profinet)
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 tool unit to reference there	VisuStage PC710T, PC717T

Technical data — CPU

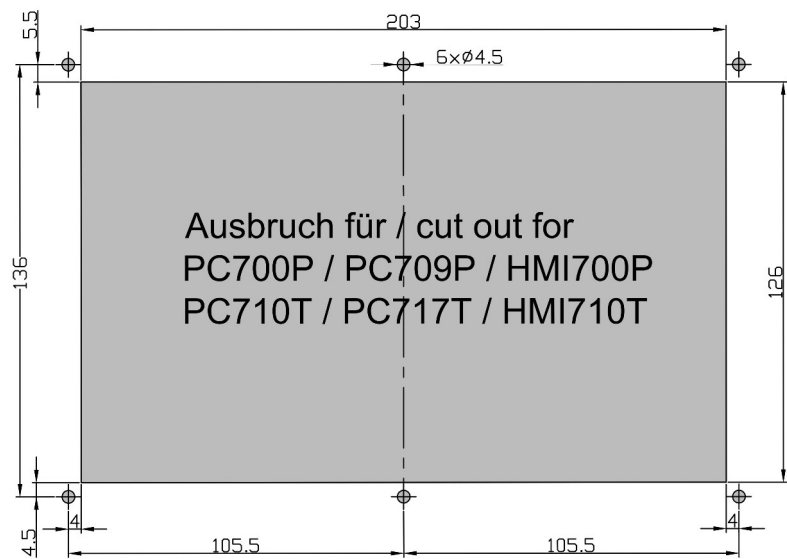| CPU-type	**CPU-T** (PC710**T**)
Working memory = battery backed load memory Diagnostic buffer	1MB 512 kByte remanent 8MB 100 entries (all remanent)

Flash
  internal - for visualization
  external memory
	48 MByte
	Micro SD, up to max. 8 GByte (not necessary for S7-program, only for archiving)

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 2.048 32kByte (2kByte per block) in each case 4.096 Byte (32.769 Bit) addressable in each case 4.096 Byte (default set is 128 Byte) 4.096 (remanence adjustable, default set is 0..15) 8 (1 Merkerbyte) in each case 512 (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 products compatible to it
Operating system Program unit to reference	compatible to S7-300® from Siemens CPU 315-2DP/PN (6ES7 315-2EH14-0AB0 and firmware V3.1 Siemens)
Serial interfaces (protocols)	COM1: RS 232 (free ASCII) COM2: RS 485 (free ASCII, Modbus-RTU)
Ethernet (protocols)	2x Ethernet: (switch or separated ports): 10/100 MBit with parts of CP343 functionality (RFC1006, TCP, UDP, Modbus-TCP)
CAN (protocols)	CAN-telegrams (Layer 2), compatible to CANopen® master 10 kBaud ... 1 MBaud
optional interface (protocol)	Profinet IO (only at PC710T-PNC-02) / Controller
Onboard periphery	none
Decentral periphery	- INSEVIS- periphery (with automatic configuration via „ConfigStage") - diverse external periphery families (Modbus RTU/TCP, CAN) - all CANopen® slaves according to DS401 - all Profinet IO-devices

Cut out in switching cabinet

Dimensions / Cut out
W x H (mm) / 203 x 126
6 holes with D 4,5mm

Mounting depth
ca. 45mm max.

Wiring outlet
standard interfaces
2x RJ45 (Ethernet)
E-CON(S)10 (Rest)
PC710T-0-02 → to the right*
PC710T-0-03 → to the left*

Profinet (PC710T-PNC-02)
2x RJ 45
→ to the top*

*) at rear view and
    horizontal mounting

Drill jig →

203
5,5
6×Ø4.5
136
126
4,5
4
105.5
105.5
4

Ausbruch für / cut out for
PC700P / PC709P / HMI700P
PC710T / PC717T / HMI710T

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 of devices

Identification	Standard	With Profinet IO Controller
S7-Panel-PLC **PC710T**	PC710T-0-03	PC710T-PNC-02

Ordering data of accessoires

Identification / Order-No.	Identification / Order-No.
Connector 2x5pin (bolt flanges) / E-CONS10-00	Micro SD-card 2GB (external memory) / E-MSD2-00
Micro SD-card 4GB (external memory) / E-MSD4-00	Micro SD-card 8GB (external memory) / E-MSD8-00

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.

Disclaimer
All technical details in this documentation were created by INSEVIS with highest diligence. Anyhow mistakes could not be excluded, so no responsibility is taken by INSEVIS for the complete correctness of this information. This documentation will reviewed regularly and necessary corrections will be done in next version. With publication of this data all other versions are no longer valid.

Disposal
Do not throw old appliances in the household waste! In the interest of environmental protection, old appliances must be collected separately from unsorted municipal waste. You can find out more about the proper disposal / return of your old appliance at www.insevis.com/disposal. Attention: The deletion of personal data on the old devices to be disposed of is the responsibility of the end user.

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