

# 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  
**Rev. 04 → 05:** Link to Security Guideline added

## 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 terminate 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 terminate 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

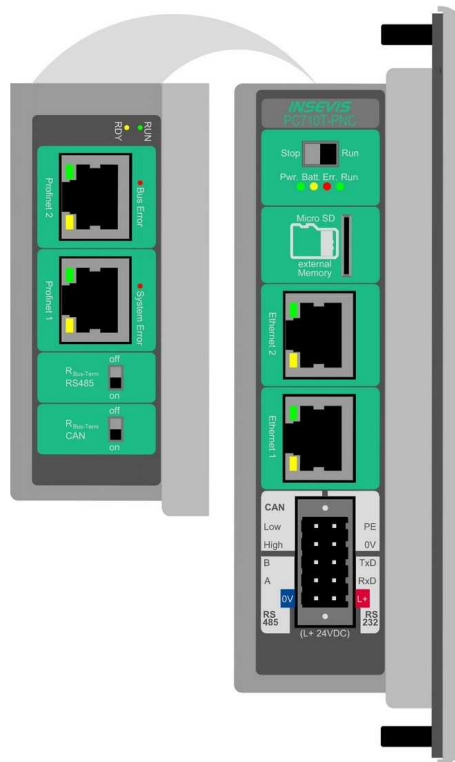
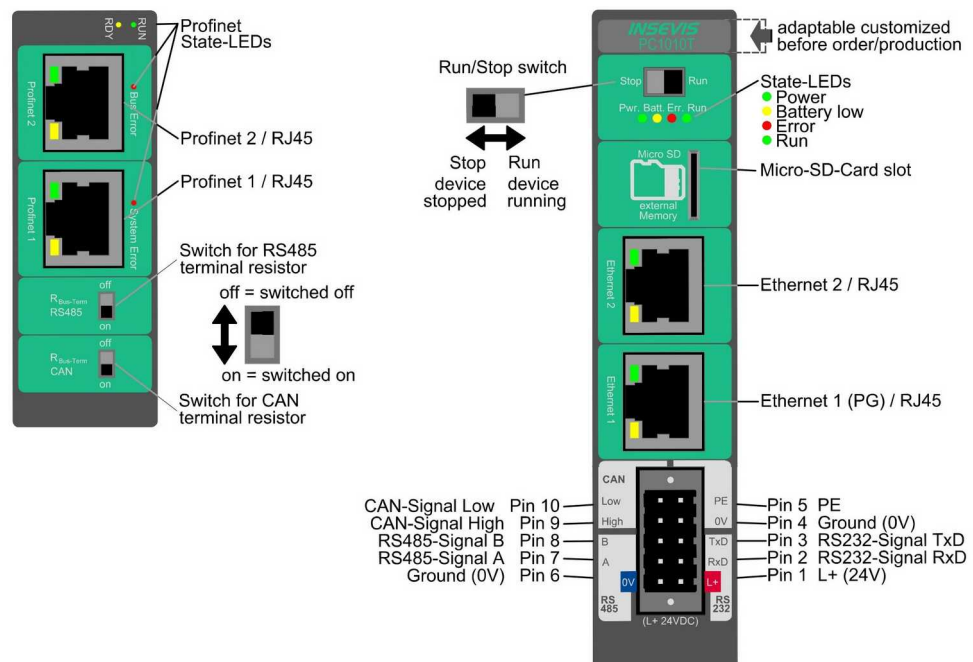


Figure above: View to rear side and connections sides of PC710T-PNC

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)<br>Cut out W x H (mm)   Weight                                                                                                                    | 222 x 147 x 50 (45 mounting depth)<br>203 x 126   ca. 700g                                                                                                                                                                                                                                                            |
| Operating temperature range<br>Storage temperature range<br>Relative humidity                                                                                               | -20°C ... +60°C (without condensation)<br>-30°C ... +80°C<br>up to 96% (without condensation)                                                                                                                                                                                                                         |
| IP-protection class<br>Vibrations                                                                                                                                           | front panel IP65   rear side IP41<br>Frequency range 2 -100Hz, amplitude 1mm peak < 13,2Hz acceleration 0,7g >13,2Hz                                                                                                                                                                                                  |
| Connection technology                                                                                                                                                       | removable connector with 2 bolt flanges<br>(cage clamp technology) for cross section up to max. 1,5mm²                                                                                                                                                                                                                |
| Load voltage L+                                                                                                                                                             | 24V DC (11 V ... 30V DC)                                                                                                                                                                                                                                                                                              |
| Current consumption<br>Power dissipation                                                                                                                                    | 150mA ... 300mA<br>4W (typ.) ... 7,5W (with Profinet)                                                                                                                                                                                                                                                                 |
| Start-up current                                                                                                                                                            | < 3A                                                                                                                                                                                                                                                                                                                  |
| Diagonal of display (inch)<br>Display resolution (pixel)                                                                                                                    | 7" (178mm)<br>800x480 Pixel (WVGA)                                                                                                                                                                                                                                                                                    |
| Display unit<br>Operating unit                                                                                                                                              | TFT display with 16Bit colours<br>analog resistive touch screen                                                                                                                                                                                                                                                       |
| Visualization tool<br>unit to reference there                                                                                                                               | VisuStage<br>PC710T, PC717T                                                                                                                                                                                                                                                                                           |
| Technical data                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                       |
| CPU                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                       |
| CPU-type                                                                                                                                                                    | <b>CPU-T (PC710T)</b>                                                                                                                                                                                                                                                                                                 |
| Working memory = battery backed<br>load memory<br>Diagnostic buffer                                                                                                         | 1MB 512 kByte remanent<br>8MB<br>100 entries (all remanent)                                                                                                                                                                                                                                                           |
| Flash<br>internal - for visualization<br>external memory                                                                                                                    | 48 MByte<br>Micro SD, up to max. 8 GByte (not necessary for S7-program, only for archiving)                                                                                                                                                                                                                           |
| OB, FC, FB, DB<br>Lokal data<br>Number of in- and outputs<br>Process image<br>Number of Merkerbytes<br>Number of Taktmerker<br>Number of timer, counter<br>Depth of nesting | each 2.048<br>32kByte (2kByte per block)<br>in each case 4.096 Byte (32.769 Bit) addressable<br>in each case 4.096 Byte (default set is 128 Byte)<br>4.096 (remanence adjustable, default set is 0..15)<br>8 (1 Merkerbyte)<br>in each case 512 (each remanence adjustable, default set is 0)<br>up to 16 code blocks |
| Real-time clock<br>elapsed hour counter                                                                                                                                     | yes (accumulator-backed hardware clock)<br>1 (32Bit, resolution 1h)                                                                                                                                                                                                                                                   |
| Program language<br>Program system                                                                                                                                          | STEP 7® - AWL, KOP, FUP, S7-SCL, S7-Graph from Siemens<br>SIMATIC® Manager from Siemens or products compatible to it                                                                                                                                                                                                  |
| Operating system<br>Program unit to reference                                                                                                                               | compatible to S7-300® from Siemens<br>CPU 315-2DP/PN (6ES7 315-2EH14-0AB0 and firmware V3.1 Siemens)                                                                                                                                                                                                                  |
| Serial interfaces<br>(protocols)                                                                                                                                            | COM1: RS 232 (free ASCII)<br>COM2: RS 485 (free ASCII, Modbus-RTU)                                                                                                                                                                                                                                                    |
| Ethernet<br>(protocols)                                                                                                                                                     | 2x Ethernet: (switch or separated ports):<br>10/100 MBit with parts of CP343 functionality<br>(RFC1006, TCP, UDP, Modbus-TCP)                                                                                                                                                                                         |
| CAN<br>(protocols)                                                                                                                                                          | CAN-telegrams (Layer 2), compatible to CANopen®<br>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“)<br>- diverse external periphery families (Modbus RTU/TCP, CAN)<br>- all CANopen® slaves according to DS401<br>- all Profinet IO-devices                                                                                                         |

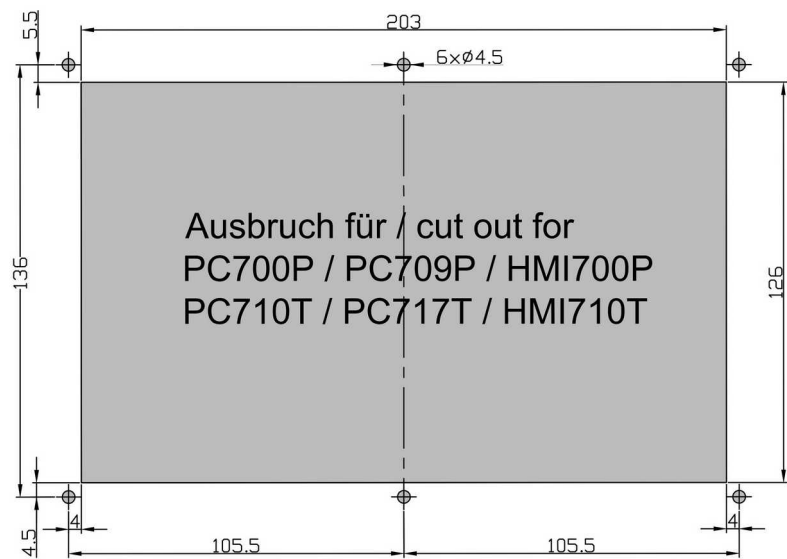
## Cut out in switching cabinet

**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 →**

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 <b>PC710T</b> | 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](http://www.insevis.com) in English language for free download.

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### Security Guideline

A guide on how to use this product to ensure compliance with the Cyber Resilience Act (CRA) can be found on the INSEVIS website at: [INSEVIS Security-Guideline](#) or on request at [info@insevis.de](mailto:info@insevis.de).

### 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](http://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.