

# **Product information**

## S7-Panel-PLC

## PC430T



Image of PC430T without Profinet (PC430T-0-03)

Image of PC430T with Profinet (PC430T-PNC-02)













(valid from PLC-version PC430T-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

 $\mbox{\bf Rev. 03} \rightarrow \mbox{\bf 04: Information for disposal of old equipment}$ 

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TI\_PC430T\_Engl\_Rev04 www.insevis.de info@insevis.de



#### Description

#### S7-Panel-PLC with

- 4,3" TFT display (480x272 pixel)
- resistive touch (front protection class IP65)

#### Standard configuration:

#### RS232 with

- free ASCII protocol

#### RS485 with

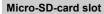
- free ASCII protocol
- Modbus RTU
- with switchable terminate resistors for RS485

### 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



- for SD-cards up to 8GByte

#### Run/Stop switch

**State LEDs** for Power, Battery, Error, Run

#### Inserting stripes

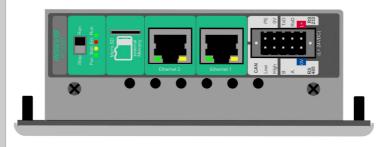
 for Logo and identification (thereby customized adaption possible easy)

### Additional configuration: (only for PC430T-PNC-02)

#### **Profinet IO Controller**

#### Scope of delivery:

- Mounting kit with grounding terminal i
- Technical data sheet



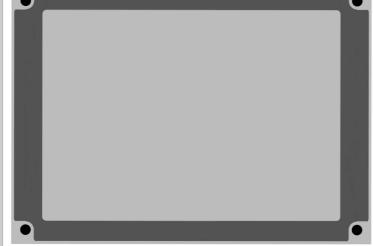
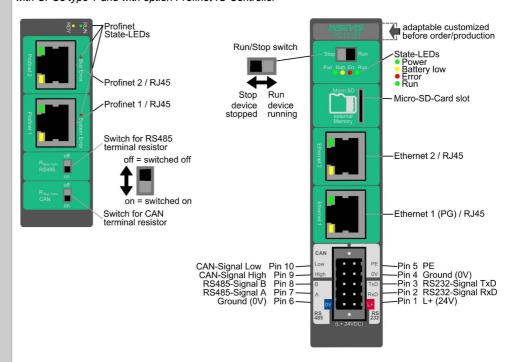




Figure above: View to rear side and connections sides of PC430T-PNC (horizontal use)

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 PC430T-0-03, but functions and connections are kept similar to the other CPU-T versions (no image, self explanatory)

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| Technical data   |  |  |
|--|--|--|
| Dimensions W x H x D (mm)  Cut out W x H (mm) / Weight   | 140 x 100 x 30 (24mm mounting depth for PC430T-0-03) 140 x 100 x 50 (43mm mounting depth for PC430T-xxx-02) 118 x 84 $/$ ca. 450g  |  |
| Operating temperature range<br>Storage temperature range   | -20°C +60°C (without condensation)<br>-30°C +80°C  |  |
| IP-protection class<br>front panel<br>rear side  | IP65<br>IP41   |  |
| Connection technology  | removable connector 2 bolt flanges (cage clamp technology) for cross section up to max. 1,5mm²   |  |
| Load voltage L+  | 24V DC (11 V 30V DC)   |  |
| Current consumption Power dissipation  | 150mA 300mA<br>4W (typ.) 7,5W (with Profinet)  |  |
| Start-up current   | < 3A   |  |
| Diagonal of display (inch)<br>Display resolution (pixel)   | 4,3" (111mm)<br>480x272 pixel (16:9-format)  |  |
| Display unit<br>Operating unit   | TFT display with 16Bit colours analog resisitive touch screen  |  |
| Visualization tool<br>unit to reference there  | VisuStage<br>PC430T, PC433T  |  |
| Technical data   | CPU  |  |
| CPU-type   | <b>CPU-T</b> (PC430 <b>T</b> )   |  |
| Working memory = battery<br>backed 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 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 015) 8 (1 Merkerbyte) in each case 512 (each remanence adjustable, default set is 0) up to 16 code blocks |  |
| Real-time clock<br>elapsed hour counter  | yes (accumulator-backed hardware clock) 1 (32Bit, resolution 1h)   |  |
| Program language<br>Program system   | STEP 7® - AWL, KOP, FUP, S7-SCL, S7-Graph from Siemens 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): 10/100 MBit with parts of CP343 functionality (RFC1006, TCP, UDP, Modbus-TCP)  |  |
| CAN<br>(protocols)   | CAN-telegrams (Layer 2), compatible to CANopen® master 10 kBaud 1 MBaud  |  |
| optional interfaces<br>(protocols)   | Profinet IO (only at PC430T-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   |  |

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#### Cut out in switching cabinet **Dimensions / Cut out** 118 W x H (mm) / 118 x 84 $4 \times \emptyset 4.5$ 4 holes with D 4,5mm Mounting depth ca. 24mm max. (PC430T-0-03) Ausbruch für / cut out for ca. 45mm max. (PC430T-PNC-02) PC430T / PC433T / HMI430T Wiring outlet standard interfaces 2x RJ45 (Ethernet) E-CON(S)10 (Rest) → downwards<sup>3</sup> Profinet (PC430T-PNC-02) 2x RJ 45 → to the left\* 5.2 5.8 \*) at rear view and horizontal mounting 129 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 of devices   |             |                             |
|----------------------------|-------------|-----------------------------|
| Identification             | Standard    | With Profinet IO Controller |
| S7-Panel-PLC <b>PC430T</b> | PC430T-0-03 | PC430T-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.

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#### Disposal

To 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 <a href="www.insevis.com/disposal">www.insevis.com/disposal</a>.

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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