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

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

Ethernet with
- RFC1006
  (S7-communication),
- 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
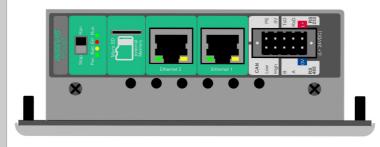 Power, Battery, Error, Run

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

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

Profinet IO Controller

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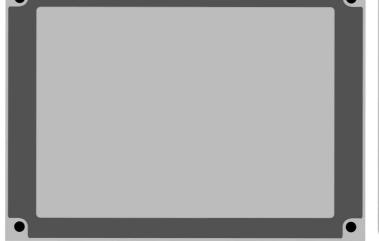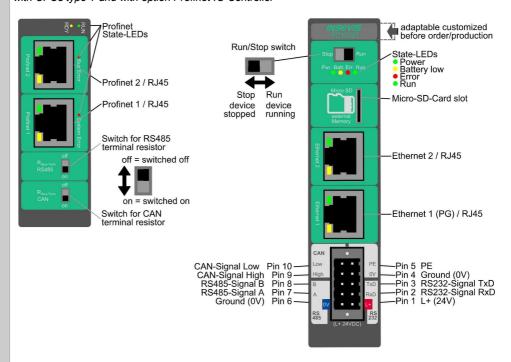- Technical data sheet

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)	140 x 100 x 30 (24mm mounting depth for PC430T-0-03)
	140 x 100 x 50 (43mm mounting depth for PC430T-xxx-02)
Cut out W x H (mm) / Weight	118 x 84 / ca. 450g
Operating temperature range	-20°C ... +60°C (without condensation)
Storage temperature range	-30°C ... +80°C
IP-protection class	
front panel	IP65
rear side	IP41
Connection technology	removable connector with 2 lift arms or 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	150mA ... 300mA
Power dissipation	4W (typ.) ... 7,5W (with Profinet)
Start-up current	< 3A
Diagonal of display (inch)	4,3" (111mm)
Display resolution (pixel)	480x272 pixel (16:9-format)
Display unit	TFT display with 16Bit colours
Operating unit	analog resisitive touch screen
Visualization tool	VisuStage
unit to reference there	PC430T, PC433T

Technical data — CPU

CPU-type	**CPU-T** (PC430**T**)
Working memory = battery	1MB 512 kByte remanent
backed load memory	8MB
Diagnostic buffer	100 entries (all remanent)
Flash	
internal - for visualization	48 MByte
external memory	Micro SD, up to max. 8 GByte (not necessary for S7-program, only for archiving)
OB, FC, FB, DB	each 2.048
Lokal data	32kByte (2kByte per block)
Number of in- and outputs	in each case 4.096 Byte (32.769 Bit) addressable
Process image	in each case 4.096 Byte (default set is 128 Byte)
Number of Merkerbytes	4.096 (remanence adjustable, default set is 0..15)
Number of Taktmerker	8 (1 Merkerbyte)
Number of timer, counter	in each case 512 (each remanence adjustable, default set is 0)
Depth of nesting	up to 16 code blocks
Real-time clock	yes (accumulator-backed hardware clock)
elapsed hour counter	1 (32Bit, resolution 1h)
Program language	STEP 7® - AWL, KOP, FUP, S7-SCL, S7-Graph from Siemens
Program system	SIMATIC® Manager from Siemens or products compatible to it
Operating system	compatible to S7-300® from Siemens
Program unit to reference	CPU 315-2DP/PN (6ES7 315-2EH14-0AB0 firmware V3.1 Siemens)
Serial interfaces	COM1: RS 232 (free ASCII)
(protocols)	COM2: RS 485 (free ASCII, Modbus-RTU)
Ethernet	2x Ethernet: (switch or separated ports):
(protocols)	10/100 MBit with parts of CP343 functionality
	(RFC1006, TCP, UDP, Modbus-TCP)
CAN	CAN-telegrams (Layer 2), compatible to CANopen®
(protocols)	master 10 kBaud ... 1 MBaud
optional interfaces	Profinet IO (only at PC430T-PNC-02)
(protocols)	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) / 118 x 84
4 holes with D 4,5mm

Mounting depth
ca. 24mm max.
(PC430T-0-03)
ca. 45mm max.
(PC430T-PNC-02)

Wiring outlet
standard interfaces
2x RJ45 (Ethernet)
E-CON(S)10 (Rest)
→ downwards*

Profinet (PC430T-PNC-02)
2x RJ 45
→ to the left*

*) at rear view and
horizontal mounting

Drill jig →

118 | 4×Ø4.5

2.5

89

2.5

84

5.2 | 5.8

129

Ausbruch für / cut out for
PC430T / PC433T / HMI430T

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 **PC430T**	PC430T-0-03	PC430T-PNC-02

Ordering data of accessoires

Identification / Order-No.	Identification / Order-No.
Connector 2x5pin (lift arms) / E-CON10-00	Connector 2x5pin (bolt flanges) / E-CONS10-00
Mounting/ grounding set for 4,3" devices* / E-MNT35-00	OEM-inserting stripe H for logo / identification for rear side* / E-LABH-00
Micro SD-card 1GB (external memory) / E-MSD1-00	Micro SD-card 4GB (external memory) / E-MSD4-00
Micro SD-card 2GB (external memory) / E-MSD2-00	Micro SD-card 8GB (external memory) / E-MSD8-00

* (1x already part of first deliveries scope)

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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