INSEVIS

Product Information

S7-Panel-PLC

PC353V
PC353P

(valid from version PC353x-xxx-**03**)

Changes to older versions of this document

Rev. 02 → 03: description of Profibus-signals made compatible to Siemens-manuals
Rev. 03 → 04: new front foil, new images, new design line, connectors added

Description

Panel-PLC with **TFT-color touch display**

- **PC353V/P 3,5"** TFT (320x240)
  with 3 periphery slots

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®
  - layer2-communication
  - with switchable terminate resistors for CAN

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

- **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**
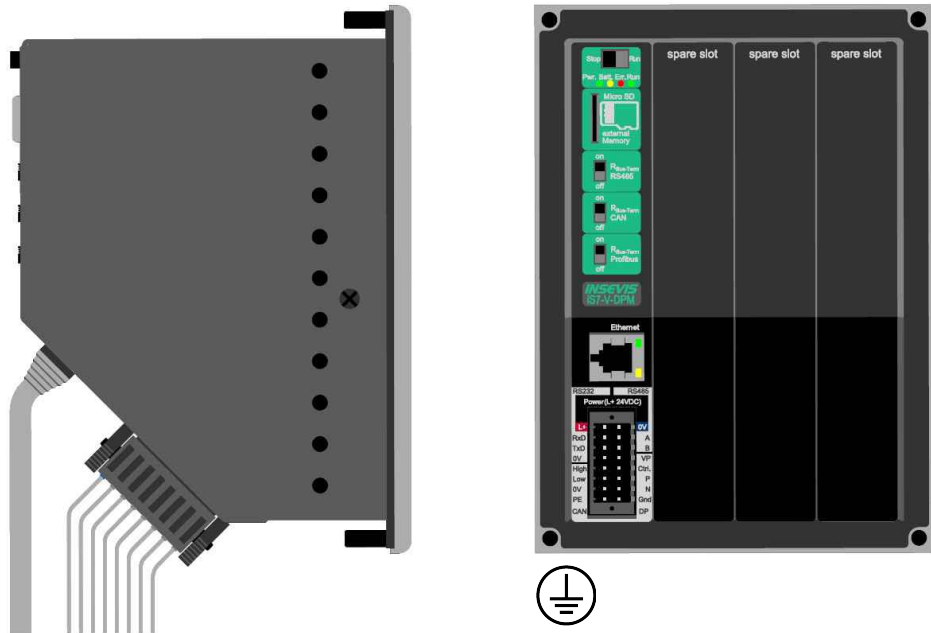 - with switchable terminate resistors for Profibus

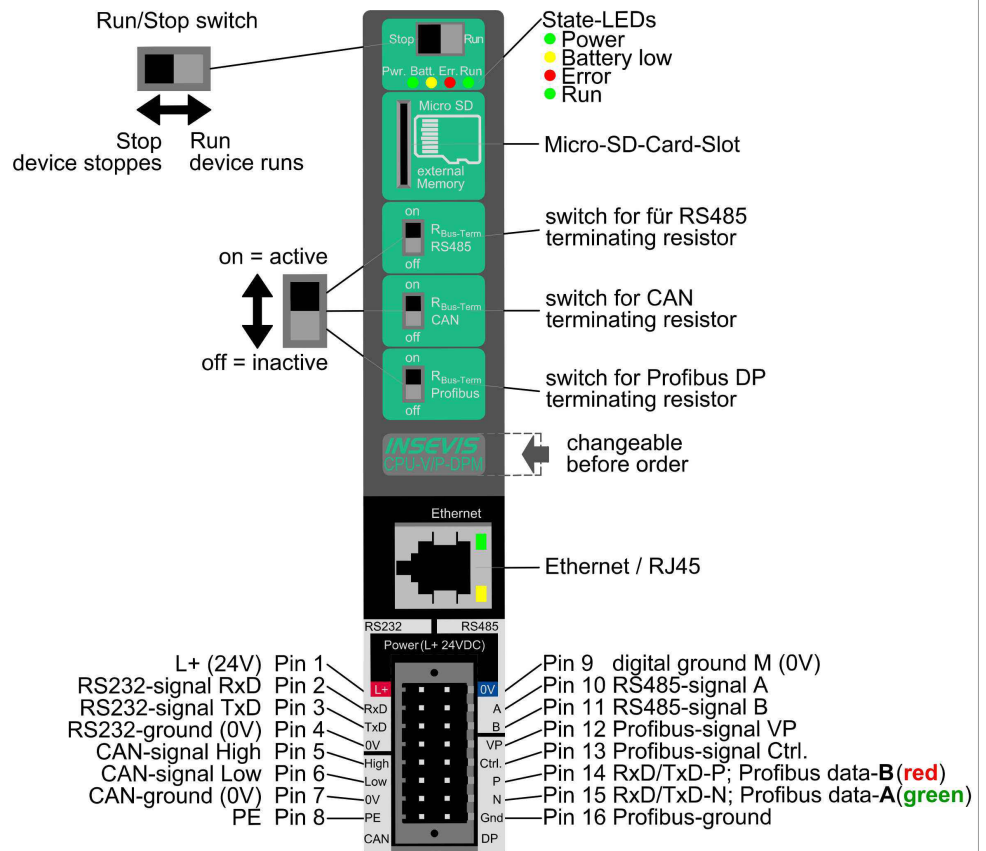*Figure above: Panel-PLC PC353 rear view and view from the side*

Run/Stop switch

Stop — device stoppes
Run — device runs

on = active

off = inactive

State-LEDs
- Power
- Battery low
- Error
- Run

Micro-SD-Card-Slot

switch for für RS485 terminating resistor

switch for CAN terminating resistor

switch for Profibus DP terminating resistor

changeable before order

Ethernet / RJ45

L+ (24V) Pin 1	Pin 9 digital ground M (0V)
RS232-signal RxD Pin 2	Pin 10 RS485-signal A
RS232-signal TxD Pin 3	Pin 11 RS485-signal B
RS232-ground (0V) Pin 4	Pin 12 Profibus-signal VP
CAN-signal High Pin 5	Pin 13 Profibus-signal Ctrl.
CAN-signal Low Pin 6	Pin 14 RxD/TxD-P; Profibus data-**B**(red)
CAN-ground (0V) Pin 7	Pin 15 RxD/TxD-N; Profibus data-**A**(green)
PE Pin 8	Pin 16 Profibus-ground

Figure above: Identification of all CPUs of all Panel-PLCs devices with onboard periphery slots with CPU-types V and P and with Profibus DP Master

Technical data	Device
Dimensions W x H x D (mm) Cut out W x H (mm) Weight	132 x 96 x 89 118 x 89 ca. 450 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^2
Load voltage L+	24V DC (11 V ... 30V DC)
Current consumption Power dissipation	50 mA ... 400 mA 2 W (typ.), 4,5 W (max.)
Start-up current	< 3A
Diagonal of display (inch) Display resolution (pixel)	3,5" (89mm) 320x240 pixel (QVGA)
Display unit Operating unit	TFT display with 16Bit colours analog resisitive touch screen
Visualization software Reference unit	VisuStage PC350V

| Technical data	CPUs	
CPU-type	**Type V** (PC350**V**)	**Type P** (PC350**P**)
Working memory = battery backed load memory Diagnostic buffer	512kB, thereof 256 kByte remanent data 100 messages (all remanent)	640kB, thereof 384 kByte remanent data 100 messages (all remanent)

Flash
  internal for visualization
  external memory card
	4 MByte
	Micro SD, up to max. 8 GByte
		24 MByte
		Micro SD, up to max. 8 GByte

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) adressable in each case 2.048 Byte (default set is 128 Byte) 2.048 (remanence adjustable, default set is 0..15) 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® - 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® 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	3 free slots for INSEVIS-periphery modules	
Decentral periphery	- INSEVIS- Periphery (with automatic configuration via „ConfigStage") - all CANopen® slaves according to DS401 - all Profibus DP-V0-slaves - diverse external periphery families	

Control panel cut out

Dimensions

Cut out
W x H (mm) 118 x 84
4 holes with D 4,5mm

Mounting depth
ca. 89mm max.

Wiring outlet
- 45° to the right
  (rear view and
  horizontal mounting)

- 45° to the button
  (rear view and
  vertical mounting)
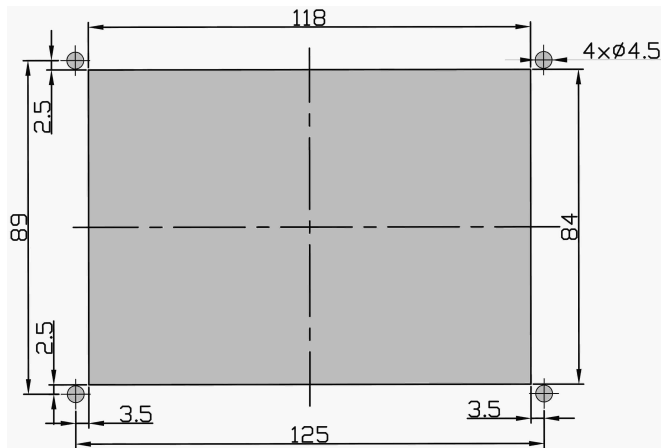
Drill jig

**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 devices

Identification	Standard	with Profibus DP Master	with Profibus DP Slave
S7-Panel-PLC **PC353V**	PC353V-0-03	PC353V-DPM-03	PC353V-DPS-03
S7-Panel-PLC **PC353P**	PC353P-0-03	PC353P-DPM-03	PC353P-DPS-03

Ordering data accessoires

Identification / Order-No.	Identification / Order-No.
Periphery module **DI16** / PM-DI16-02	Periphery module **MIO84** / PM-MIO84-02
Periphery module **DIO16** / PM-DIO16-02	Periphery module **AI8O2** / PM-AI8O2-02
Periphery module **DO-4R** / PM-DO4R-02	Periphery module **AI4O4** / PM-AI4O4-02
Functional module **DIO8-Z** (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 3,5"-devices * / E-MNT35-00 (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/ identification for rear side (PU100 pcs.)
Micro SD-card 1/2/4/8GB (ext. memory) / E-MSD1/2/4/8-00	

* (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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