

Product information

# S7-Compact-PLC

# CC311T



(Figure contains optional periphery modules)



(valid from PLC-version CC311T-xxx-02)

## Changes to older versions of this document

none

## Description

### S7-Compact-PLC for 35mm DIN-rail with 11 peripheral slots

#### 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: (optional)

##### Profinet IO Controller

#### Scope of delivery:

- Grounding terminal
- Technical data sheet

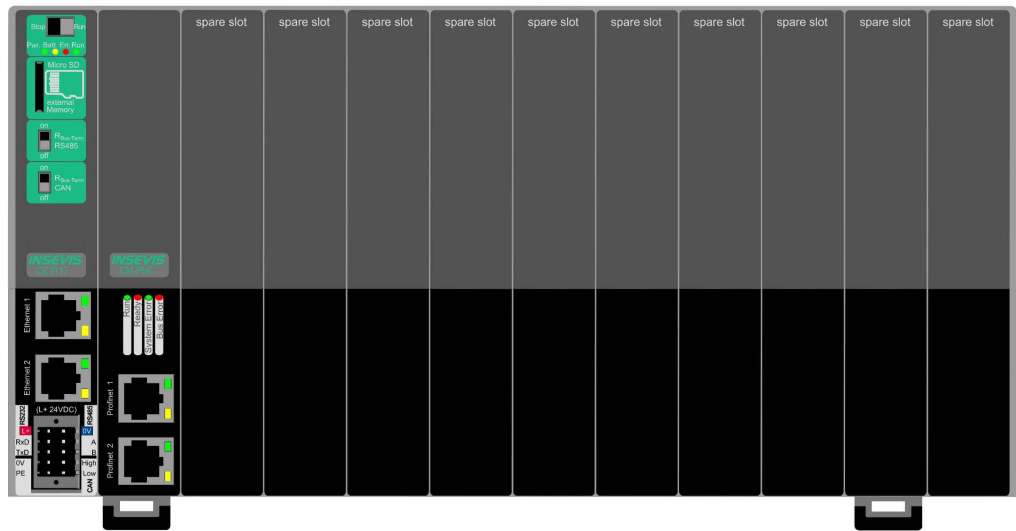
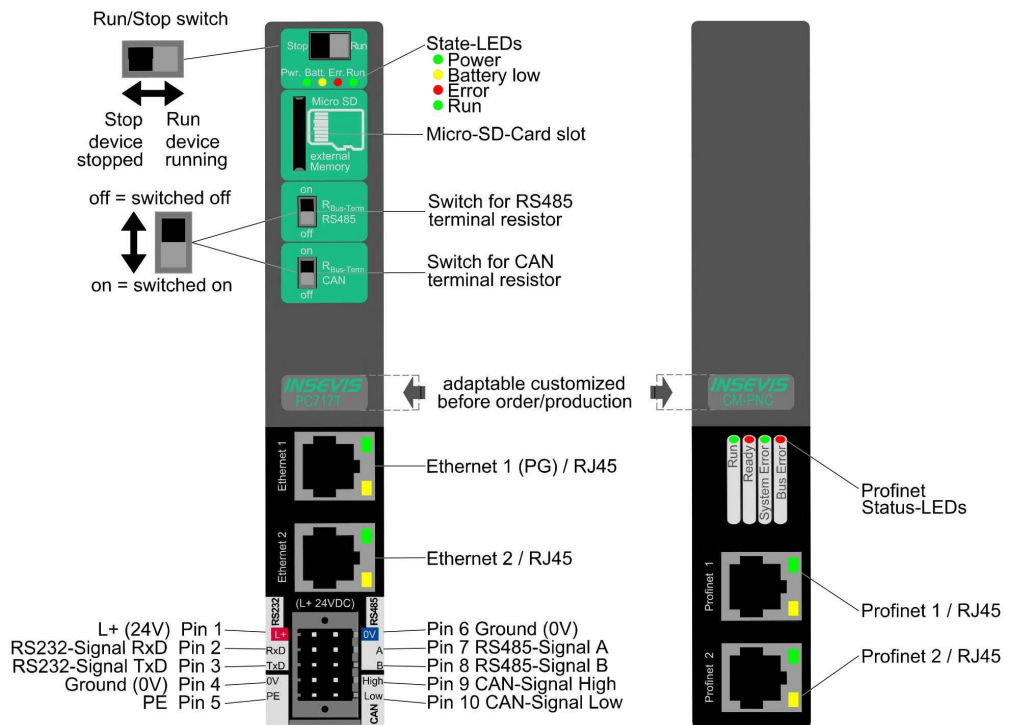


Figure above: View to rear side and connections sides of PC311T-PNC (horizontal use)

Figure below: CPU-connections of all Compact-PLC-devices with peripheral slots with CPUs type T and with option Profinet IO Controller on slot 1



Technical data	
Dimensions W x H x D (mm)	240 x 116,5 x 98
Cut out W x H (mm)	35mm DIN rail
Protection class	IP41
Weight	ca. 600g
Operating temperature range	-20°C ... +60°C (without condensation)
Storage temperature range	-30°C ... +80°C
Connection technology	removable connector with 2 lift arms or 2 bolt flanges (cage clamp technology) for cross section up to max. 1,5mm <sup>2</sup>
Load voltage L+	24V DC (11 V ... 30V DC)
Current consumption	150mA ... 1700mA
Power dissipation	3,6W (typ.) ... 40,8W (mit Profinet and full of periphery)
Start-up current	< 3A
Technical data	
CPU	
CPU-type	CPU-T (CC311T)
Working memory / battery backed load memory	1MB / thereof 512 kByte remanent
Load memory	8MB
Diagnostic buffer	100 entries (all remanent)
Flash 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 elapsed hour counter	yes (accumulator-backed hardware clock) 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 (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/ slave 10 kBaud ... 1 MBaud
optional interfaces (protocols)	Profinet IO Controller
Onboard periphery	11 slots for INSEVIS-periphery modules
Decentral periphery	- INSEVIS- periphery (with automatic configuration via „ConfigStage“) - diverse external periphery families (Modbus RTU/TCP, CAN) - all CANopen® slaves according to DS401 - all Profibus DP-V0-slaves

## Documentation and samples



Internet: <http://www.insevis.com/>  
 Box: Downloads / Quicklinks  
 Download: TI-CC xxxx.pdf  
 Box: Downloads / Quicklinks  
 Download: Manual Cmpact-PLC.pdf



Internet: <http://www.insevis.com/>  
 Box: Downloads / Quicklinks  
 Download: PLC-demos, S7-Lib, etc.  
 INSEVIS provides sample programs lots of functions, well documented for free download.

## Ordering data of devices

Identification	Standard	With Profinet IO Controller
S7-Compact-SPS <b>CC311T</b>	CC311T-0-02	CC311T-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
Additional kit of grounding terminals* (VPE10)	Inserting stripe V for logo and identification for rear side* / E-LABV-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.

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