

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

Rev. 01 → **02**: New design line, periphery modules added
Rev. 02 → **03**: Information for disposal of old equipment
Rev. 06 → **07**: Link to Security Guideline added

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

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: (optional)

Profinet IO Controller

Scope of delivery:
- Grounding terminal
- Technical data sheet

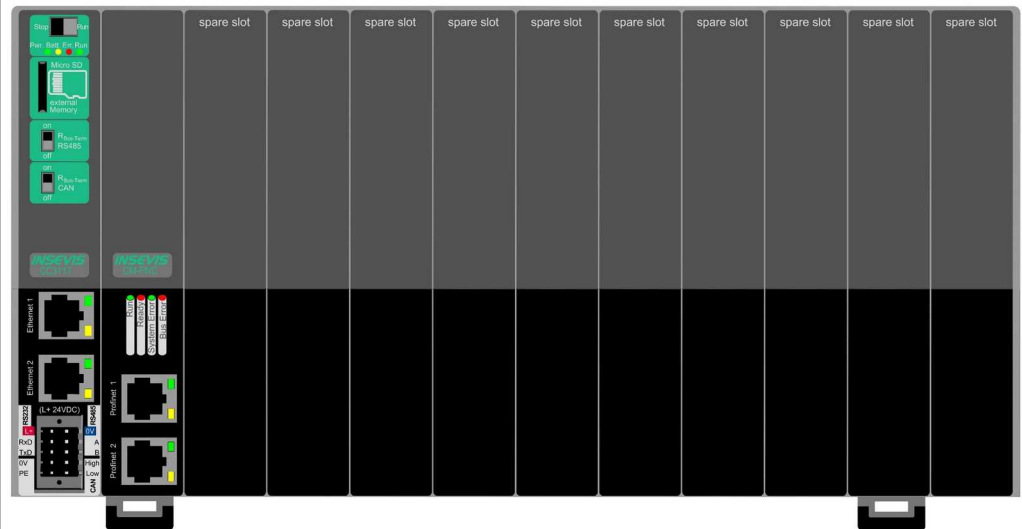
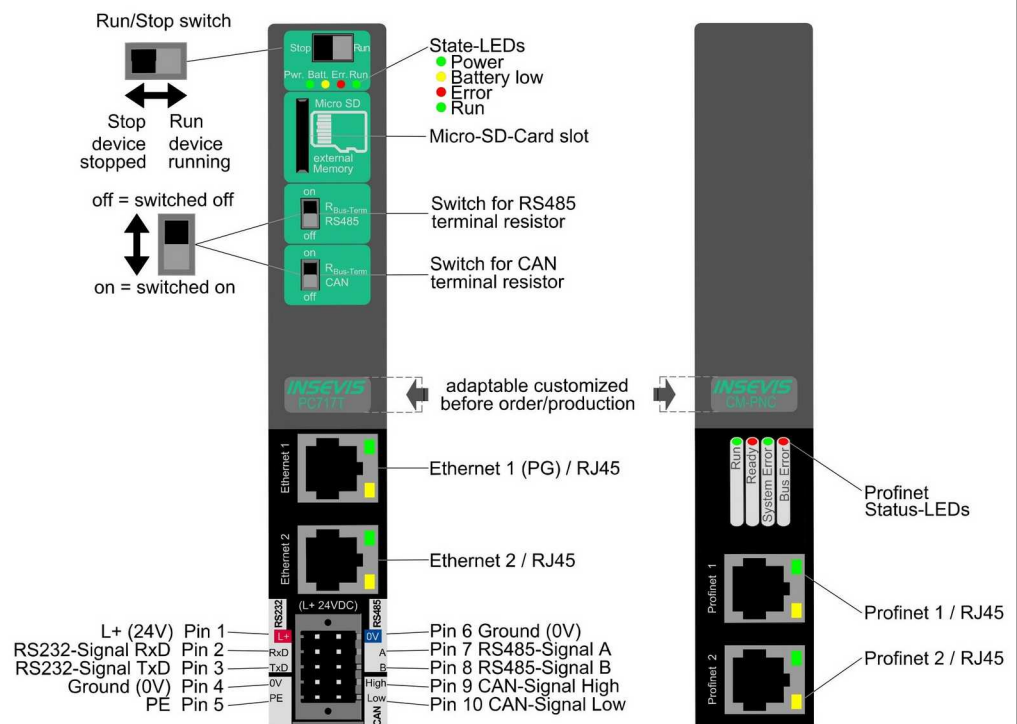


Figure above: View to rear side and connections sides of PC311T-PNC (horizontal use)

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 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 ... 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	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 and 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 (with Profinet-option slot 1 is occupied)
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

Ordering data of devices

Identification	Standard	With Profinet IO Controller
S7-Compact-PLC CC311T	CC311T-0-02	CC311T-PNC-02

Ordering data of accessoires (Peripheral modules to be ordered separately as required)

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.

Copyright

This and all other documentation and software, supplied or hosted on INSEVIS web sites to download are copyrighted. Any duplicating of these data in any way without express approval by INSEVIS Vertriebs GmbH is not permitted. All property and copy rights of these documentation and software and every copy of it are reserved to INSEVIS Vertriebs GmbH.

Trade Marks

INSEVIS refers that all trade marks of particular companies used in own documentation are reserved trade marks are property of the particular owners and are subjected to common protection of trade marks.

Disclaimer

All technical details in this documentation were created by INSEVIS with highest diligence. Anyhow mistakes could not be excluded, so no responsibility is taken by INSEVIS for the complete correctness of this information. This documentation will reviewed regularly and necessary corrections will be done in next version. With publication of this data all other versions are no longer valid.

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.

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.

Attention: The deletion of personal data on the old devices to be disposed of is the responsibility of the end user.