

Product Information

S7-Compact-PLC

CC311V



(valid from version CC311V-xxx-03)

Changes to older versions of this document

In Rev. 3 changed: description of Profibus-signals made compatible to Siemens-manuals

Description

Compact-PLC for 35mm DIN-rail

- **CC311V** with 11 slots for periphery

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 8 GByte

- **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

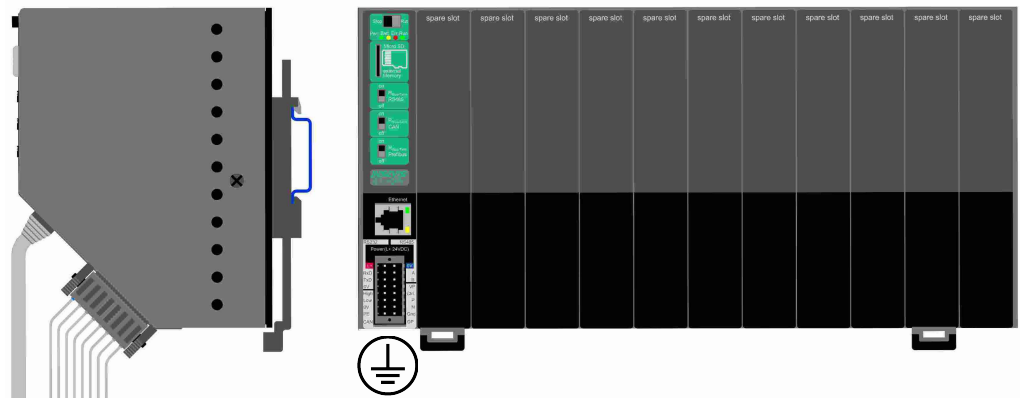


Figure above: Compact-PLC CC311V rear view and view from the side

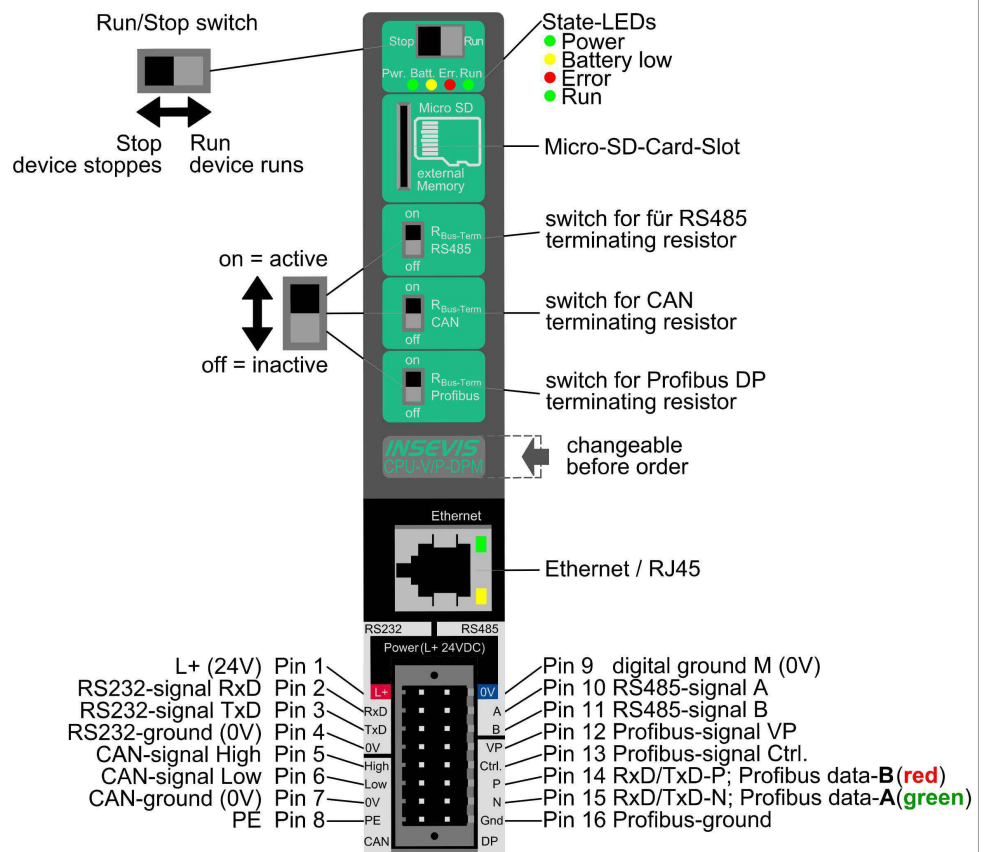


Figure above: Identification of all CPUs of all CompactPLCs devices with periphery slots, with CPU-type V and with Profibus DP Master

Technical data	
Dimensions W x H x D (mm) Weight	240 x 116,5 x 98 ca. 900g
Mounting IP-leak protection class	to clip on a 35mm DIN-rail IP41
Operating temperature range Storage temperature range	-20°C ... +60°C (without condensation) -30°C ... +80°C
Connection technology	unlockable connector with self-lock and 2 lift-arms (cage clamp technology) for cross section up to max. 1,5mm ²
Load voltage L+	24V DC (11 ... 30V DC)
Current consumption Power dissipation	20 mA ... 485 mA 0,5 W (typ.), 10 W (max.)
Technical data CPU	
CPU-type	Type V (CC311V)
Working memory = battery backed load memory Diagnostic buffer	512kB, thereof 256 kByte remanent data 100 messages (all remanent)
Internal flash memory External flash memory	4 MByte Micro SD, up to max. 8 GByte (not necessary for operation)
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) addressable 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 315-2PN DP
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-Telegramms (Layer 2), compatible to CANopen® MasterSlave 10 kBaud ... 1 MBaud
Profibus (protocols)	Profibus DP V0 master/ slave 9,6kBaud ... 12 MBaud
Onboard periphery	11 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

Ordering data devices

Identification	Standard	with Profibus DP Master	with Profibus DP Slave
S7-Compact-PLC CC311V	CC311V-0-03	CC311V-DPM-03	CC311V-DPS-03

Ordering data accessoires

Identification / Order-No.	Identification / Order-No.
Periphery module DI16 / PM-DI16-02	Periphery module AI8O2 / PM-AI8O2-02
Periphery module DIO16 / PM-DIO16-02	Periphery module AI4O4 / PM-AI4O4-02
Periphery module DO-4R / PM-DO4R-02	Periphery module RTD8O2 / PM-RTD8O2-02
Functional module DIO8-Z (configurations reg. catalog)	Periphery module E-MESS UI / PM-E-MESS UI-02
Periphery module MIO84 / PM-MIO84-02	
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	Shield cable support for CC307V / E-CONPEC7-00 / <i>on request only</i>
Connector 2x10pin (for analog PM) / E-CON(S)20A-00	Grounding loop * (PU 10pcs.) / E-MNT-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
OEM- Inserting stripe V for logo and identification for rear side (PU100 pcs.)	Profibus-adapter for 12MBaud-nets / E-AD-DP12

* (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.

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 GmbH is not permitted. All property and copy rights of these documentation and software and every copy of it are reserved to INSEVIS 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.

With publication of this information all other versions are no longer valid.