

## Product information

# S7-Compact-PLC CC300T



(valid from PLC-version CC300T-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:** Information for disposal of old equipment  
**Rev. 03 → 04:** Link to Security Guideline added

## Technical data

### S7-Compact-PLC for 35mm DIN-rail

#### 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

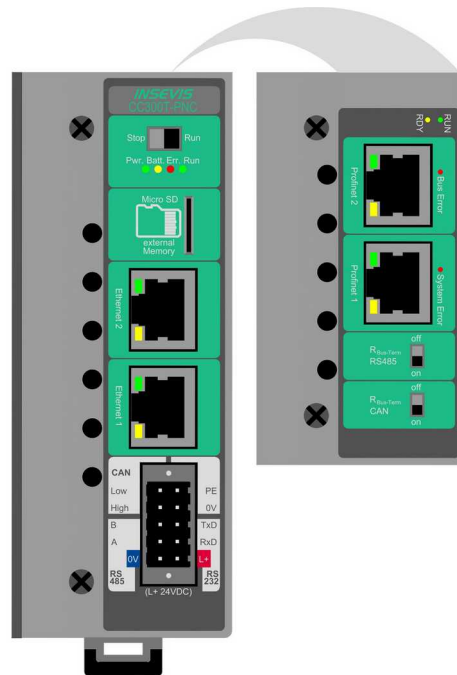
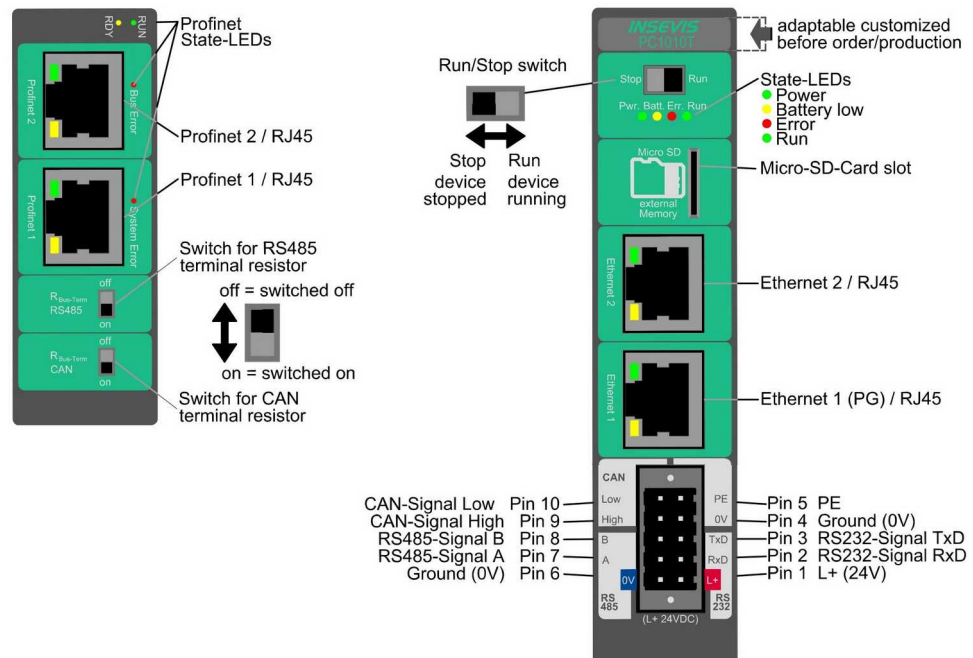


Figure above:  
View to connection side CC300T-PNC

Figure below:  
CPU-connections of CC300T-basic devices (without periphery slots) and with option Profinet IO Controller



| Technical data                              |                                                                                                                                                                                                                 |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions W x H x D (mm)                   | 47 x 116 x 84                                                                                                                                                                                                   |
| Cut out W x H (mm)                          | 35mm DIN rail                                                                                                                                                                                                   |
| Protection class                            | IP41                                                                                                                                                                                                            |
| Weight                                      | ca. 500g                                                                                                                                                                                                        |
| Operating temperature range                 | -20°C ... +60°C (without condensation)                                                                                                                                                                          |
| Storage temperature range                   | -30°C ... +80°C                                                                                                                                                                                                 |
| Connection technology                       | removable connector with 2 bolt flanges<br>(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 ... 300mA                                                                                                                                                                                                 |
| Power dissipation                           | 3,6W (typ.) ... 7,2W (with Profinet)                                                                                                                                                                            |
| Start-up current                            | < 3A                                                                                                                                                                                                            |
| Technical data CPU                          |                                                                                                                                                                                                                 |
| CPU-type                                    | <b>CPU-T (CC300T)</b>                                                                                                                                                                                           |
| 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)<br>COM2: RS 485 (free ASCII, Modbus-RTU)                                                                                                                                              |
| Ethernet (protocols)                        | 2x Ethernet: (switch or separated ports):<br>10/100 MBit with parts of CP343 functionality<br>(RFC1006, TCP, UDP, Modbus-TCP)                                                                                   |
| CAN (protocols)                             | CAN-telegrams (Layer 2), compatible to CANopen®<br>master/ slave 10 kBaud ... 1 MBaud                                                                                                                           |
| optional interfaces (protocols)             | Profinet IO<br>Controller                                                                                                                                                                                       |
| Onboard periphery                           | none                                                                                                                                                                                                            |
| Decentral periphery                         | - INSEVIS- periphery (with automatic configuration via „ConfigStage“)<br>- diverse external periphery families (Modbus RTU/TCP, CAN)<br>- all CANopen® slaves according to DS401<br>- all Profibus DP-V0-slaves |

## Ordering data of devices

| Identification               | Standard    | With Profinet IO Controller |
|------------------------------|-------------|-----------------------------|
| S7-Compact-PLC <b>CC300T</b> | CC300T-0-02 | CC300T-PNC-02               |

## Ordering data of accessoires

| 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](http://www.insevis.com) in English language for free download.

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### 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](mailto: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](http://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.