

Product Information

Decentral

Periphery Interface

DP311C



(valid from version DP311C-02)

Changes to older versions of this document

In Rev. 3 changed: new connectors, periphery modules added, new design line
In Rev. 4 changed: information added for LED-state, CAN-settings and potential separation/wire length

Description

decentral head station for
periphery modules

35mm DIN Rail

- DP311C with 11 free
periphery slots

Head station

- communication to PLC
with a protocol
compatible
to CANopen®
- with switchable terminate
resistors for CAN

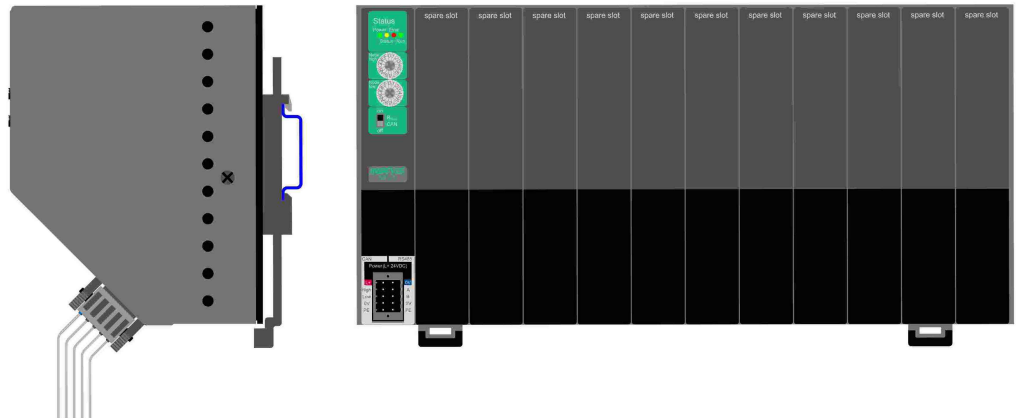


figure above: Sample of decentral head station DP311C from read sid and from the side

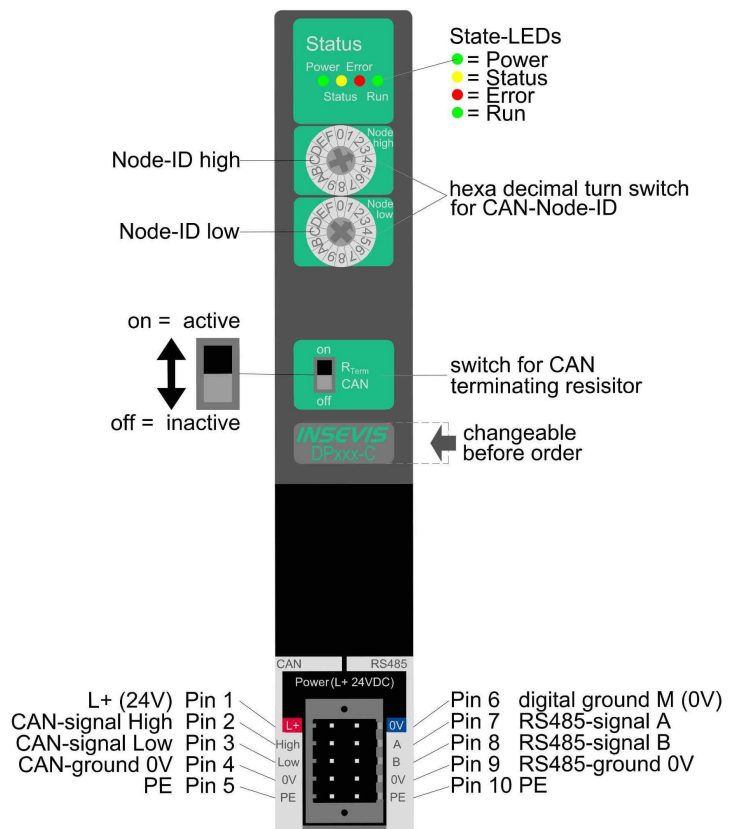
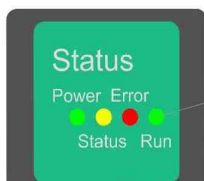


figure above: Description of all connections of all decentral interface stations of type C

Technical data	
Dimension W x H x D (mm) Weight	242 x 116,5 x 92 ca. 800g
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 ... 275 mA 0,5 W (typ.), 4,5 W (max.)
Start-up current	< 3A
CAN Interface Potential separation Wire length	none (nonisolated, bound to L+ and periphery slots) 30 m (using sufficient potential equalisation)
Periphery slots	11 free slots for INSEVIS-periphery modules

Status-display by LEDs in the periphery heads DP3xxC



Status-LEDs

- = Power
- = Status
- = Error
- = Run

Green Power LED

signalizes proper power supply.

Yellow Status-LED

warns about missing traffic. If no data were received for > 150 ms, this LED will lit up.

Red Error-LED

signalizes communication problems, mostly caused by wiring.

1x flash:

warning level reached due to too many corrupted data

2x flash:

NodeGuardEvent - node returns into PREOPERATIONAL due to lost host connection

Steady light (2 seconds): internal communication error, Timeout by peripheral module

Steady light (5 seconds): switch into bus-off due to too many corrupted data

RUN-LED slowly blinking

signalizes node state PREOPERATIONAL: Station is waiting for configuration data.

There is no process data communication. Steady light signalizes node state OPERATIONAL:

Configuration is done, station is ready and updates process data.

Fast flashing between RUN- and ERROR-LED signalizes Auto-Baud-Mode after power up until first data are recognized.

CAN-settings

As global parameter a **baudrate** is to be determined.

For physical reasons the maximum baudrate of a CAN bus depends on the maximum line length. In case of inserted repeater or isolators an additional reduction of baudrate may be required.

Baudrate (kbit)	maximum busline length (m)
1000	20 ... 50
500	100
250	250
125	500
50	1000

Ordering data device

Identification	Order-no.	Packaging unit
interface station for decentral periphery DP311C	DP311C-02	PU: 1 piece

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 2x5pin (for head station) / E-CON(S)10-00	Connector 1x8pin (for DO4R) / E-CON8-00
Connector 2x10pin (for digital PM) / E-CON(S)20D-00	Shield cable support for DP311C / E-CONPEC11-00 / <i>on request only</i>
Connector 2x10pin (for analog PM) / E-CON(S)20A-00	Grounding loop * (PU 10pcs.) / E-MNT-00
OEM- Inserting stripe V for logo and identification for rear side (PU100 pcs.)	

* (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

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