Product Information

Decentral Periphery Interface

DP307C

(valid from version DP307C-**02**)

Changes to older versions of this document

Rev. 02 → 03: new connectors, periphery modules added, new design line
Rev. 03 → 04: information added for LED-state, CAN-settings and potential separation/wire length
Rev. 04 → 05: Information for disposal of old equipment

Description

decentral head station for periphery modules

35mm DIN Rail

- **DP307C** with 7 free periphery slots

Head station
- communication to PLC with a protocol compatible to CANopen®
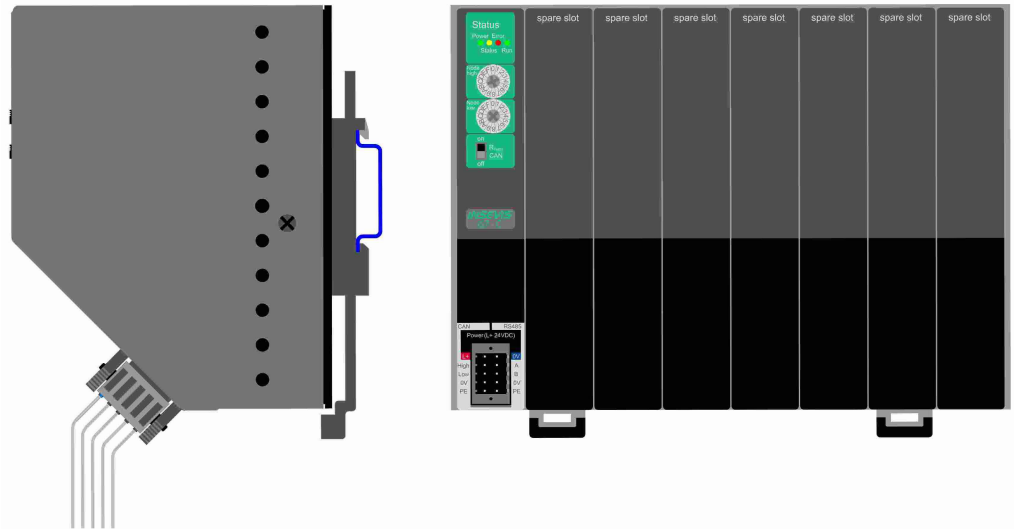- with switchable teminate resistors for CAN

figure above: Sample of decentral head station DP307C from read sid and from the side
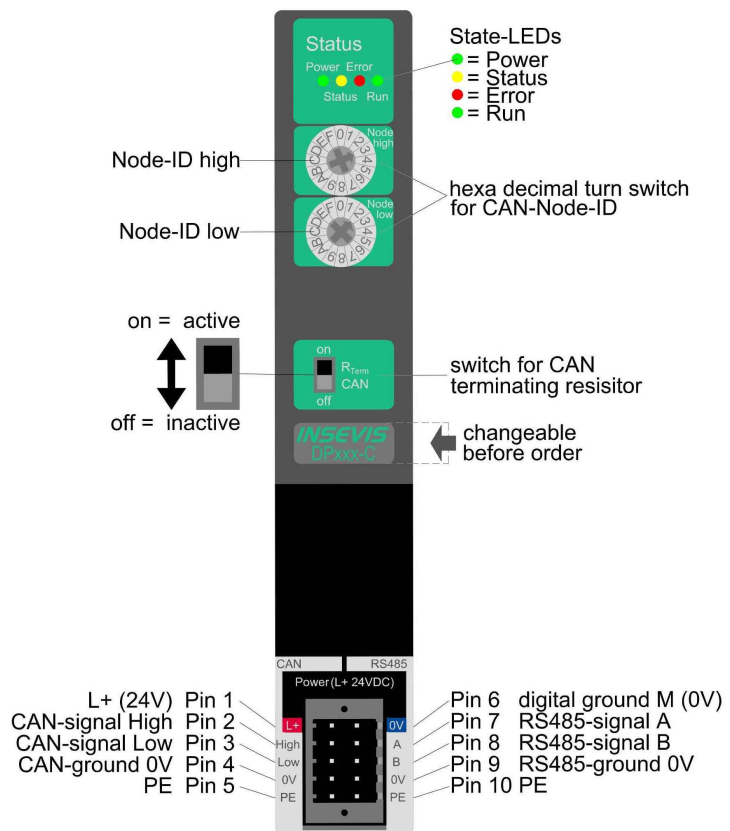

State-LEDs
- ● = Power
- ● = Status
- ● = Error
- ● = Run

Node-ID high

Node-ID low

hexa decimal turn switch for CAN-Node-ID

on = active

off = inactive

switch for CAN terminating resisitor

changeable before order

CAN   RS485
Power (L+ 24VDC)

L+ (24V) Pin 1	Pin 6 digital ground M (0V)
CAN-signal High Pin 2	Pin 7 RS485-signal A
CAN-signal Low Pin 3	Pin 8 RS485-signal B
CAN-ground 0V Pin 4	Pin 9 RS485-ground 0V
PE Pin 5	Pin 10 PE

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

Technical data

Dimension W x H x D (mm) Weight	162 x 116,5 x 92 ca. 600g
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	7 free slots for INSEVIS-periphery modules

Status-display by LEDs in the periphery heads DP3xxC
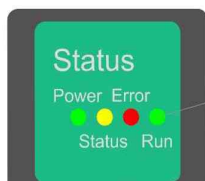
Status-LEDs
- ● = Power
- ● = Status
- ● = Error
- ● = Run

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

Ordering data device

Identification	Order-no.	Packaging unit
interface station for decentral periphery **DP307C**	DP307C-02	PU: 1 piece

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	

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.

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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.

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