

# Digital optical transmission system DOtech Type LIN26 for LINBUS diagnosis: Technical specification



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## Principle of transmission

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The transmission system consists of two identical transceiver circuits. The supply is done by an external battery  $U_{bat}$ . The system serves for the bi-directional optical transmission of digital LINBUS signals in harsh electromagnetic environments and for bus simulations during emission tests.

## Technical data

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### System

- o Two identical transceivers, interchangeable
- o Fault LED
- o Transmitter and receiver are usable on different voltage levels
- o manual switching of the pull-up-resistors for operation in master- and slave-mode and display via LEDs
- o Transmission capability: DC – 20 kBaud
- o  $U_{bat}$ :  $5\text{ V} < U_{bat} < 35\text{ V}$
- o Guaranteed susceptibility:  $\hat{E} = 400\text{ V/m}$
- o Pull-up-resistor  
   master mode: 1 kOhm
- o Pull-up-resistor  
   slave mode: 20 kOhm
- o Input capacitance of the LINBUS:  $C_{in} < 200\text{ pF}$
- o Housing: aluminium, connected to ground
- o Housing dimensions: 100 x 80 x 50 mm
- o Electrical connectors:
 

LINBUS	female connector, green
$U_{bat}$	female connector, red
Ground	female connector, black
- o Optical connectors:
 

RX	receiver input
TX	transmitter output

### Fibre optics

Style: Duplex multimode 62,5/125  $\mu\text{m}$   
 Connectors (RX and TX): FSMA