

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



Copyright 2008: NK-Elektronik. All rights reserved. Subject to changes.

Principle of transmission

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

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 μm
 Connectors (RX and TX): FSMA