

## Digital optical transmission system for K-Line (ISO 9141)

### General information

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The transmission system is used for bidirectional optical transmission of digital K-Line signals and consists of two identical EMI hardened transceiver modules, powered by an external battery power supply.

### Technical Data

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#### System

- Transceiver modules interchangeable
- Indicator for thermal overload
- Receiver and Transmitter can be supplied with different voltages
- Automatically switching of the pull-up-resistors (12V or 24V power supply, dependent on  $U_{bat}$ ), signaling via LED
- transmissionrate: DC – 30 kBaud
- $U_{bat}$ :  $5\text{ V} < U_{bat} < 35\text{ V}$
- RF/ EMI:  $\dot{E} = 400\text{ V/m}$
- Pull-up-resistor (12 V mode): 510 Ohm
- Pull-up-resistor (24 V mode): 1 kOhm
- Input capacitance K-Line:  $C_{in} < 2\text{ nF}$
- Housing: Aluminium
- Dimensions: 100 x 80 x 50 mm
- Terminals: K-Line  
 $U_{bat}$   
GND
- Optical ports: RX  
TX

#### Optical fibre

Type: Duplex-Multimode optical fibre 62,5/ 125  $\mu\text{m}$   
Optical connectors for RX und TX: FSMA