

**Digital optical transmission system
DOtech Type M
Submodules “CAN-H2” and “CAN-H4”:
Technical specification**

Principle of transmission

The digital optical transmission system DOtech Type M consists of two pairs of transceiver circuits interconnected by two optical fibres. Each of these transceivers consists of a basic module (power supply, optics and control logic) and a submodule that transforms the incoming and outgoing data into an adequate form. The power supply is provided by an internal, rechargeable battery inside the basic module. The system serves for the unidirectional or bidirectional, non-reactive and potential free optical transmission of analogue and digital signals in harsh electromagnetic environments.

It is usable both for emission and susceptibility tests.

Submodules “CAN-H2” and “CAN-H4”

2 x HS-CAN (“CAN-H2, CAN-H4”), 1 x LS-CAN (“CAN-H4”)

1 x LS-CAN-Single-Wire (“CAN-H4”)

Specification HS-CAN:	according to ISO 11898, maximum transmission rate up to 1 MBaud,
Bus impedances HS-CAN:	selectable by switch: 60 Ohm, 120 Ohm or open
Specification LS-CAN:	according to ISO 11519, maximum transmission rate up to 125 kBaud
Bus impedances LS-CAN:	selectable by switch: 100 Ohm, 500 Ohm or 1 kOhm
Specification Single-Wire-CAN:	maximum transmission rate up to 33 kBaud
Bus impedance Single-Wire-CAN:	fix
Maximum length of optic fibre:	may not exceed 20 m!
Housing:	aluminium, nickel plated
Ambient temperature:	0°C – 70°C
Storage temperature:	-20°C – 85°C
„On“-indication:	LED
Applicable to:	Immunity tests according to ISO 11452-x, ESD according to DIN EN-61000-4-2, ISO 10605 Emission tests according CISPR 25, 22
Guaranteed working area:	@ $\hat{E} \leq 300 \text{ V/m}$ @ $f_{\text{Susceptibility}} \geq 1 \text{ MHz}$ @ $\hat{I} \leq 200 \text{ mA}$ @ $f_{\text{Susceptibility}} \geq 1 \text{ MHz}$