opto5x

Bus Systems / Automotive Links

Field of application and characteristics

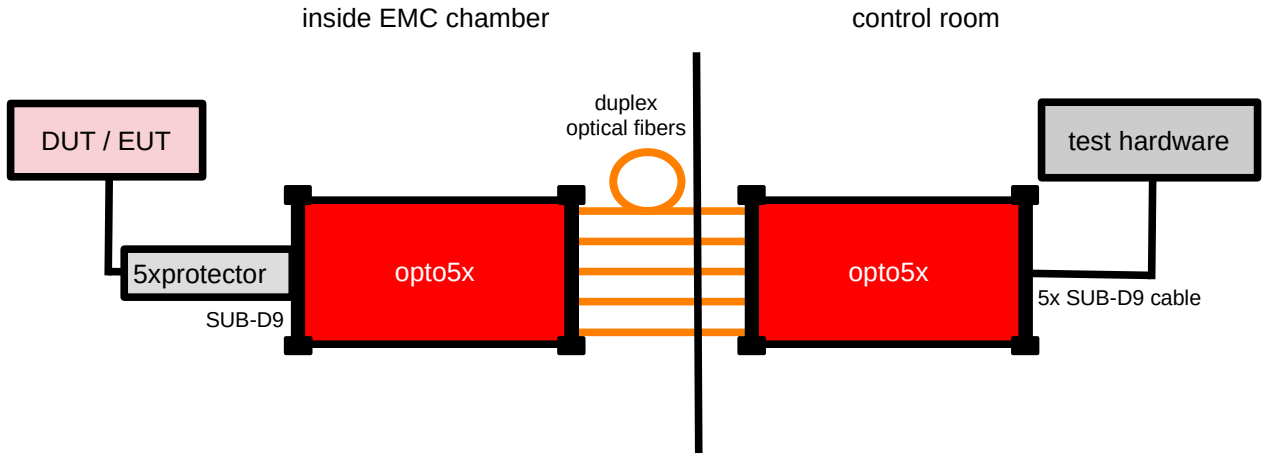
For test setups with many CAN or LIN channels, setup time and place can be reduced by using our *opto*5x devices. An *opto*5x can replace up to five single devices. In each base unit, up to five equal or different channels can be integrated. CAN-FD, CAN-HS und LIN are provided as standard, further interfaces are available on demand.

The *opto*5x devices can also be built with or without integrated batteries or with different charge connectors. All channels are compatible to our single devices.

Via the connection plate made of aluminum, GND is connected centrally for the *opto*5x. The CAN devices initially do not have a termination resistor. Latter one is defined by the protector which is plugged into the SUB-D connector (60 Ω or 120 Ω).

The system consists of transceivers connected to each other with an optical fiber. With the optical transmission and the shielded case, the system is well equipped for EMI and EME tests with automotive standards such as CISPR 25 class 5.

Application



Technical data

Channels:	1-5 channels
Signals:	CAN-FD and LIN can be integrated at the moment. CAN and LIN only or mixed setups
Input:	SUB-D 9 pin female
Output:	SUB-D 9 pin female

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Power supply:	integrated batteries 4 Ah, consisting of 5x NiMH cells, 6 V operating time with fully charged batteries: approx. 10 h (total run time depends on integrated transceivers) operating time can be extended with an external battery pack
Charging connector:	Binder 712 (push-pull 12 mm PP12 or 9 mm PP9 on request)
Housing:	anodized aluminum case with rubber feet 130 mm x 160 mm x 60 mm
Weight:	approx. 1000 g
Optical connector:	each channel: 2x FSMA / duplex multimode fiber 62.5/125 µm, 850 nm

Scope of delivery

- 1x opto5x base unit transceiver
- 1-5 mini transceiver channels
- 1x charger for the integrated batteries, AC plug types available: A(US), C(EU), G(UK) and I(AUS)
- 1x opto5x GND connection plate (20 mm)
- 8x Philips screw M3x8

Accessories and options

19" rack:	up to 13 interfaces (CAN, LIN, LAN, USB and etc.) can be installed in the 19” housing, device in the chamber will be the compact opto5x battery supplied mobile device 
Protector (mini):	external CAN-HS/-FD protector 60 Ω external CAN-HS/-FD protector 120 Ω external CAN-HS/-FD protector infinite external LIN/K-Line/CAN-SW protector customized protectors available
Optical fiber - types:	FSMA, ST, FC, LC, E2000 (combinations possible), 62.5/125 µm or 50 µm
Optical fiber - lengths:	0.5 m – >20 m (maximal possible length depends on interface)
Optical fiber - feedthrough:	FSMA/FSMA, ST/FSMA, ST/ST, FC/FC

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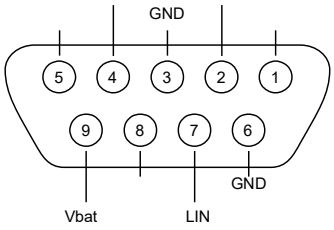
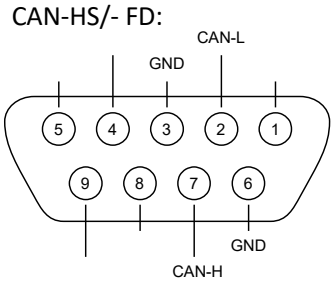
Optical fiber - cleaning:	Fiber optic cleaning set
Optical connector - protective caps:	protective cap/cover for male FSMA optical fibers captive cap/cover for male FSMA optical fibers (connected to the cable => does not get lost)
Optical connector - protective caps:	protective cap/cover of FSMA optical input/output of mk devices captive cap/cover of FSMA optical input/output of mk devices
External battery pack BP60:	for run time enhancement of the device in the EMC chamber 4 Ah or10 Ah (additional high capacity charger needed)
Power supply:	PS75-5m (suitable charger for Binder 712 devices) PS75-5m PP12 (suitable charger for push pull 12 mm devices) constantly powering the device in the control room (does not charge the device) AC plug types available: A(US), C(EU), G(UK) and I(AUS)

SUB-D connector

LIN:



CAN-HS/- FD:



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