Field of application and characteristics

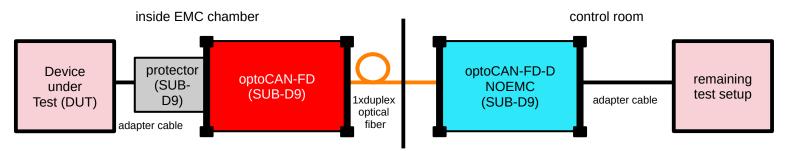
The *opto*CAN-FD-D system can be used for the optical transmission of highspeed CAN signals with transmission rates of up to 8 Mbit/s. The special setup (*opto*CAN-FD-D) of the device outside the EMC chamber enhances the maximum possible fiber length.

The system consists of two battery supplied 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.



If requested, the CAN-FD-D transceiver can be built into a 19" rack case. If the equipment is always used at the same location, this reduces errors, setup time, and space on the tables of the control room. Up to 13 different or same automotive link channels can be integrated into a 3HE case powered by one power supply (additional channels can be purchased and integrated later on).

Application



Technical data

Channels: 1 channel

Data rate: up to 8 Mbit/s

Data direction: bidirectional

Input: SUB-D9

Output: SUB-D9

CAN transceiver: device in EMC chamber: TJA1044GT/1Z, termination switchable (60 Ω , 120 Ω , open)

device in the control room: optimized setup, built-in 120 $\boldsymbol{\Omega}$ termination

CAN choke: device in EMC chamber: B82789C0513N002, 51 uH

device in the control room: none

Power supply: integrated batteries 4 Ah, consisting of 5x NiMH cells

operating time with fully charged batteries: approx. 30 h

Housing: aluminum case with rubber protectors

135 mm x 86 mm x 65 mm



Datasheet v001.00

optoCAN-FD-D

2025-04-23

Weight: approx. 800 g

Optical connector: $2x FSMA / 2x duplex multimode fiber 62.5/125 \mu m$

Options

- 5 cell external power pack (4 Ah or 10 Ah) for run time enhancement
- push-pull charge connector (advantage: save setup time)
- other optical connectors available
- 19" rack installation
- for test setups where several interfaces are needed, we offer opto5x base units with five independent CAN channels
- ...

