

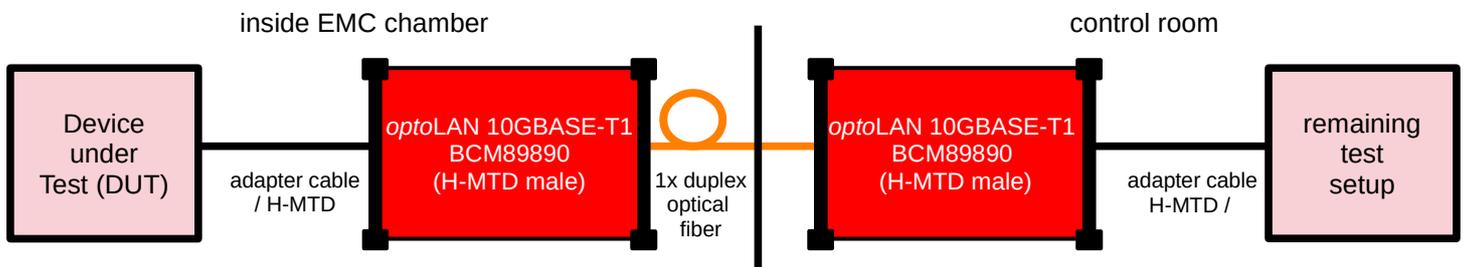
Field of application and characteristics

The *opto*LAN-10GBASE-T1 BCM89890 system is a digital bidirectional optical transmission device for automotive Ethernet LAN-10G/5G/2.5GBASE-T1 signals (switchable).

The system uses optical transmission on a fiber to avoid emissions and susceptibility of electric, magnetic, or electromagnetic fields. The system is used for the transmission and supervision of signals during EMC functional tests.



Application



Technical data

Channels:	1 channel
Data rate:	max. 10 Gbit/s (2.5GBASE-T1 / 5G BASE-T1/ 10G BASE-T1, switchable)
Data direction:	bidirectional
Input:	Rosenberger H-MTD male plug
Output:	Rosenberger H-MTD male plug
Power supply:	integrated batteries 4 Ah, consisting of 10x NiMH cells, 12 V operating time with fully charged batteries: approx. 20 h 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 protectors, stackable 135 mm x 86 mm x 86 mm
Weight:	approx. 1200 g
Optical connector:	1x FSMA / duplex multimode fiber 62.5/125 μ m, 850 nm

Scope of delivery

- 1x optoLAN 10GBASE-T1 BCM89890 Transceiver
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- 1x 20 m duplex multimode optical fiber (OM1) FSMA/FSMA
- 2x charger for the integrated batteries, AC plug types available: A(US), C(EU), G(UK) and I(AUS)

Accessories and options

Optical fiber - types:	FSMA, ST, FC, LC, E2000 (combinations possible), 62.5/125 µm or 50 µm
Optical fiber - lengths:	0.5 m – >100 m
Optical fiber - feedthrough:	FSMA/FSMA, ST/FSMA, ST/ST, FC/FC
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 BP120:	for run time enhancement of the device in the EMC chamber 4 Ah or 10 Ah (additional high capacity charger needed)
Power supply PS120:	for constantly powering the device in the control room

Pinout Rosenberger H-MTD male plug (seen from front)

