

Field of application and characteristics

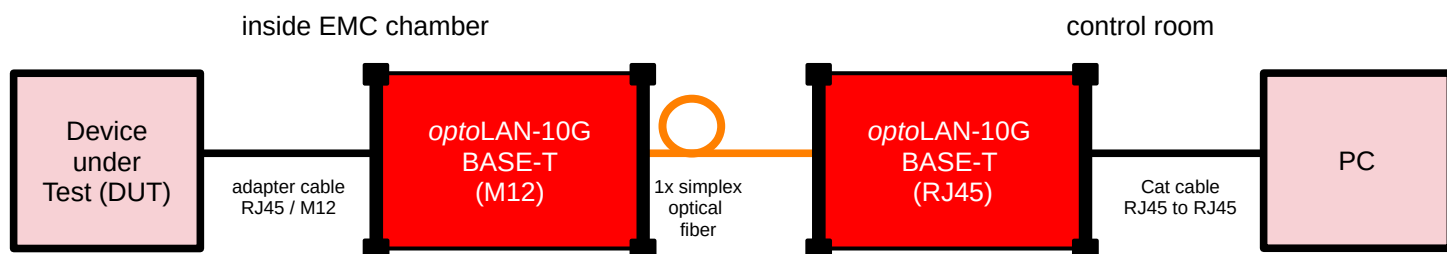
The *opto*LAN 10GBASE-T system can be used for the optical transmission of standard Ethernet signals (PC) with a data rate up to 10 Gbit/s (10GBASE-T). It is downwards compatible to 5G/2.5G/1000BASE-T, as well as 100BASE-TX.

Fiber interface compatibility to automotive Ethernet devices allows the devices to be used for media converter applications.

The two transceivers are supplied by an internal battery and connected via an optical fiber. Due to the optical transmission and the shielded housing, the system – especially the devices with the METZ CONNECT M12 connector – is well equipped for EMI and EME tests.



Application



Technical data

Channels:	1 channel
Data rate:	10GBASE-T; 5GBASE-T; 2.5GBASE-T; 1000BASE-T; 100BASE-TX Autonegotiation or selectable data rate by GUI access
Data direction:	bidirectional
Input:	device in EMC chamber: METZ CONNECT M12 8 pole with according adapter cable to RJ45
Output:	device in control room: RJ45 standard Ethernet connector
Power supply:	integrated batteries 4 Ah, consisting of 10x NiMH cells, 12 V operating time with fully charged batteries: approx. 13 h at 10GBASE-T Operating time with lower rates: 17 h at 5G, 18 h at 2,5G, 22 h at 1G, 27 h at 100M
Housing	aluminum case with rubber protectors 135 mm x 86 mm x 85 mm
Weight:	approx. 1240 g
Optical connector:	2xFSMA / duplex multimode fiber 62.5/125 µm, OM1

Scope of delivery

- **optoLAN 10GBASE-T** BCM84881 Transceiver M12
- **optoLAN 10GBASE-T** BCM84881 Transceiver RJ45
- 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 – > 50 m (longer distances to be clarified)
Optical fiber - feedthrough:	FSMA/FSMA, ST/FSMA, ST/ST, FC/FC
Optical fiber - cleaning:	Fiber optic cleaning set protective cap/cover for male FSMA optical fibers
Optical connector - protective caps:	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 BP84:	for run time enhancement of the device in the EMC chamber 4 Ah or 10 Ah (additional high capacity charger needed)
Power supply PS150, 1.2 A:	for constantly powering the device in the control room

M12 Connector:

