

LMC-01.BF Fast Ethernet Media Converter

Ruggedized type

Description:

The LMC series introduces the media converter housed in a robust metal box. It provides Expanded Beam connectors for fiber optic cable and copper twisted pairs ports for harsh environmental conditions. The LMC rugged design extends the use of Ethernet in harsh environmental conditions – heavy industry, petrochemical, mines, broadcasting and other field applications. It meets the demands for mobility, easy installation and the mechanical resistance necessary for deployment in the field. The LMC converters give you the freedom to extend your 10/100/1000 Mbps cabling distance by allowing connectivity up to 2 km over MM fiber, up to 50 kilometers if use the SM fiber. LED indicators show the power status of the converter, LAN port and fiber activity.

The basic LMC-01.BF configuration includes the media converter in ruggedized box. Data transmission and power supply are ensured via separate ruggedized connectors, copper wires cables might be ordered as accessories.



Features:

- 10/100Base-TX to 100Base-FX Converter
- Designed for interconnection of LANs in harsh environment conditions
- Fiber connectivity up to 2 km for MM up to 50 km for SM
- Expanded Beam OPTOKON HMA fiber optic connector
- Auto-Negotiation
- Auto MDI/MDIX
- Forward 1600 bytes (Max.) packets
- Supports IEEE 802.1q Tag VLAN pass through
- Support flow control (Pause)
- Supports Link Fault Pass through (LFP)
- Supports Jumbo Frame 9K Packet in converter mode (100/full)

Specifications:

| | |
|------------------------------------|---|
| Standards | IEEE 802.3 10Base-T, 802.3u 100Base-TX IEEE 802.3u 100Base-FX |
| Protocol | CSMA/CD |
| Interface | Rugged RJ-45 port using copper twisted pair cable ¹ : data transmission Rugged power supply port: power supply HMA connector: 62.5/125 μm or 50/125 μm MM fiber optic cable 9/125 μm SM fiber optic cable |
| Wavelength | MM: 1310 nm SM: 1310 nm, 1550 nm |
| Maximum Segment Length | UTP cable (10Base-T, 100Base-TX): 100 m MM fiber optic cable, full duplex: 2 km SM fiber optic cable, full duplex: 10, 30, 50 km |
| Environmental Temperature Humidity | According to MIL-STD 810E Operating -30°C to +50°C, Storage -50°C to + 70°C 10% to 95% |
| Mechanical | According to MIL-STD 810G and ČOS 999902 |
| EMC | According to MIL-STD 461E, MIL-STD 461F, EN 55022, EN 61000-6-3 |
| Power Supply ² | DC type: external 10.5 – 36 V DC; DC12 type: 12 DC; power consumption: <4 W PoE PD (Power over Ethernet powered device: IEEE 802.3af) |
| Dimension | LMC-01.BF: 148 x 108 x 77 mm (box) / 180 x 130 x 120 (including connectors) |

Note: 1) Copper wires cable, which ensures data connection and power supplying – can be delivered on request
2) AC/DC power supply adaptor – can be delivered on request, please contact: sales@optokon.cz

Ordering Code:

LMC-01.BF - XX - HMA - XX - XX - (BK⁶)

100M converter

Fiber Type

M5: MM 50/125 μm
M6: MM 62.5/125 μm
S3: SM 1310 nm
S5⁵: SM 1550 nm

Connector Type⁴

Distance Connectivity³

XX: MM
10: 10 km
30: 30 km
50: 50 km

Power Supply

DC: 10.5 – 36 V
DC12: 12 V
PD: PoE powered device

Note: 3) MM fiber – the distance depends on fiber type, up to 2 km.

SM fiber – longer distance on request

4) HMA-J standard, other on request

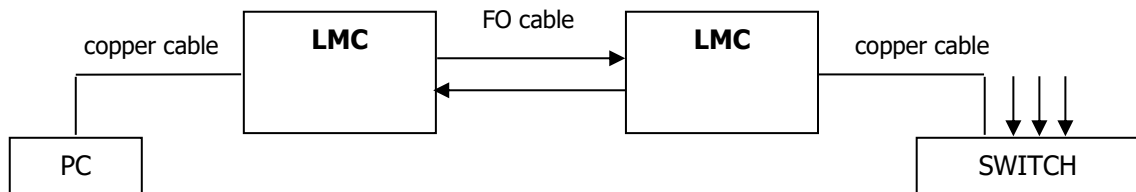
5) 1550 nm – DFB laser, 50 km distance connectivity

6) Standard green khaki RAL 6014 mat color

please use -BK in P/N code if black color RAL 9005 mat required, application: industry, broadcasting, ...

Applications:

Schematic diagram



Typical applications:

- temporary installations
- field networks
- petrochemical and heavy industry
- disaster control

Accessories:

- Documentation and User Manual

Options: Cables: data and power supply⁸:

- data cable: LANCAB-6BR-08 CAT6 RJF (bayonet) – RJ45 plug, 8 m, (alias LMSW08B-LAN-08)
- power supply cable: PSCAB3-03 3 Cu wires, shielded, 62GB connector to bare wires



DC power supply cable



LAN cable



Tactical cable with HMA-J connectors

Note: 7) When PD (PoE powered device) ordered – no power supply cable required