

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 – 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: 146 x 106 x 75 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	Connector Type⁴	Distance Connectivity³	Power Supply
	M5: MM 50/125 μm M6: MM 62.5/125 μm S3: SM 1310 nm S5⁵: SM 1550 nm		XX: MM 10: 10 km 30: 30 km 50: 50 km	DC: 10 – 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

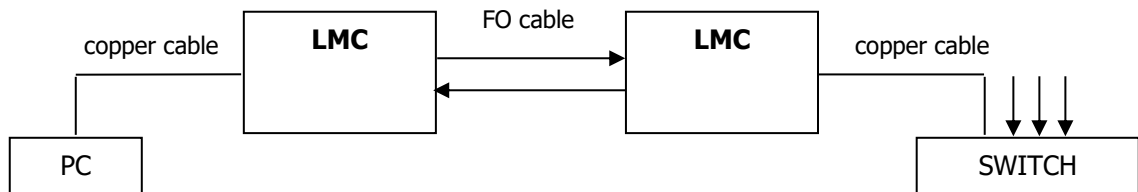
5) 1550 nm – DFB laser, 50 km distance connectivity

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 supply⁷:
 - data cable, LAN-RJ45 (IP67)/RJ-45, 8 m length
LMCAB-LAN-08-RJF6MG-RJ45 (army code LMSW08B-LAN-08)
 - power supply cable, type according to power supply ordered, 3 m length:
LMCAB-PSC-03-62GB-16J08-33PN-DC, 3 wires shielded DC power supply cable



LMCAB-PSC-03-62GB-16J08-33PN-DC



LMCAB-LAN-08-RJF6MG-RJ45



Tactical cable with HMA-J connectors

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