

# LMC-01.GF Gigabit 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.GF configuration includes the media converter in ruggedized box. The optical and electrical ports converters are terminated at separate connectors, HMA type for FO, rugged RJ-45 for copper LAN interface. Power supply is ensured via 3-pins rugged connector and/or PoE (PD – powered device) via LAN cable.



LMC-01.GF-S3-HMA-10-DC

## Features:

- 10/100/1000BASE-T to 100/1000BASE-X converter
- Auto-Cross over for MDI/MDIX in TP port
- Auto-Negotiation or Manual mode in TP port
- Support flow control Enable or Disable
- Support Jumbo Frame 9K Packet
- Ingress/Egress Bandwidth control
- Support 802.3ah-OAM/IP in-band management
- Firmware upgrade via Web
- Management Password Setting
- Dying gasp (remote power failure detection)
- Support Link Fault Pass Through (LFP) Function
- Support Auto Laser Shutdown (ALS) Function
- Web management on stand-alone.
- Support On-Line F/W upgrade (local) by the Web manager
- Support 16 Tag VLAN Group
- RMON counters

## Specifications:

Standards	IEEE 802.3 10Base-T, 802.3u 100Base-TX, 802.3ab 1000BASE-T IEEE 802.3u 100Base-FX, 802.3z 1000BASE-X,
Protocol	CSMA/CD
Interface	Rugged RJ-45 port using copper twisted pair cable <sup>1</sup> : 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, IP 63 protection
EMC	According to MIL-STD 461E, MIL-STD 461F, EN 55022, EN 61000-6-3
Power Supply <sup>2</sup>	external 10 – 36 V DC; power consumption: <4 W PoE PD (Power over Ethernet powered device: IEEE 802.3af)
Dimension	LMC-01.GF: 146 x 106 x 75 mm (box) / 180 x 130 x 120 (including connectors)
Weight	1.0 kg DC, 1.03 kg DC/PD, 0.9 kg PD version

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.com

## Ordering Code:

**LMC-01.GF - XX - HMA - XX - XX - (BK<sup>6</sup>)**

<b>1G converter</b>	<b>Fiber Type</b>	<b>Connector Type<sup>4</sup></b>	<b>Distance Connectivity<sup>3</sup></b>	<b>Power Supply</b>
	<b>M5:</b> MM 50/125 μm <b>M6:</b> MM 62.5/125 μm <b>S3:</b> SM 1310 nm <b>S5<sup>5</sup>:</b> SM 1550 nm		<b>XX:</b> MM <b>10:</b> 10 km <b>30:</b> 30 km <b>50:</b> 50 km	<b>DC:</b> 10 – 36 V <b>DC12:</b> 12 V <b>PD:</b> PoE powered device <b>DC/PD:</b> powered both DC and PD

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

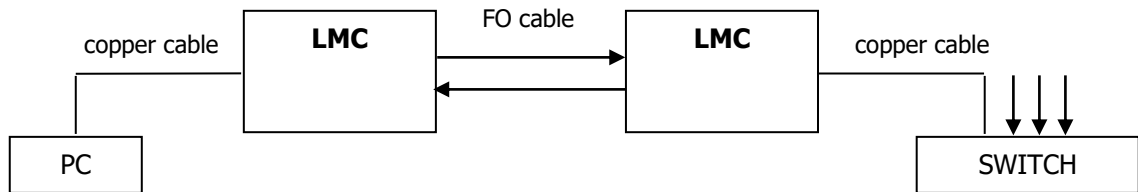
5) 1550 nm – DFB laser, 50 km distance connectivity

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 supply<sup>7</sup>:
  - 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



LMC-01.GF-S3-HMA-10-PD

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