

# LMC-02.GFD

## Gigabit Ethernet Media Converter

### Ruggedized type

#### Description:

The LMC-02.GFD series introduces the two media converters housed in a robust metal box. It provides one Expanded Beam HMA-J connector for both fiber optic ports and copper twisted pairs ports for harsh environmental conditions. The LMC rugged design extends the use of Ethernet in military, aerospace, broadcasting, petrochemical and harsh industrial applications. It meets the demands for mobility, easy installation and the mechanical resistance necessary for tactical 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-02.GFD configuration includes two independent media converters in one box. Power supply for both converters is ensured via one connector.



#### Features:

- Two 1G media converters
- 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
- 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 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 2x RJ-45 ports 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	
EMC	According to MIL-STD 461F, EN 55022, EN 61000-6-3	
Power Supply	external 10.5 – 36 V DC; power consumption: <6 W PoE PD (Power over Ethernet powered device: IEEE 802.3af)	
Dimension	LMC-02.GFD: 148 x 108 x 77 mm (box) / 223 x 108 x 77 (including connectors)	

Note: 1) Copper wires cable, which ensures data connection and power supplying – can be delivered on request

## Ordering Code:

**LMC-02.GFD - XX - HMA - XX - XX / (BK<sup>4</sup>)**

### 2x 1G converters

separate FO ports  
separate LAN ports  
common power supply

### Fiber Type

**M5:** MM 50/125  $\mu$ m  
**M6:** MM 62.5/125  $\mu$ m  
**S3:** SM 1310 nm  
**S5<sup>3</sup>:** SM 1550 nm

### FO Connector

### FO Distance<sup>2</sup>

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

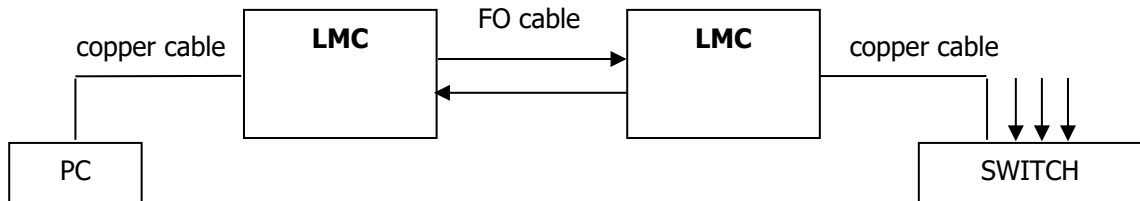
### Power Supply

**DC:** 10.5 – 36 V  
**DC12:** 12 V  
**PD:** PoE powered device  
**DC/PD:** powered both DC and PD

Note: 2) MM fiber – the distance depends on fiber type, up to 2 km.  
3) 1550 nm – DFB laser, 50 km distance connectivity  
4) 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
- military tactical networks
- petrochemical and heavy industry
- disaster control

## Accessories:

- Documentation and User Manual

**Options:** Cables: data and power supply<sup>8</sup>:

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