

# LMC-01.GM

## Gigabit Micro Media Converter

### Ruggedized type

#### Description:

The LMC-01.GM offers the media converter housed in a metal box. It provides Expanded Beam connectors for fiber optic cable and copper twisted pairs ports for harsh environmental conditions. The LMC-01.GM 10/100/1000 Mbps adaptive Gigabit Ethernet media converter adopts switching technology to fulfill media conversion. It complies with IEEE802.3, IEEE802.3u, IEEE802.3z and IEEE802.3ab standards.

Presently it supports two types of media network connections: 10Base-T/100Base-TX/1000Base-T, and 100/1000Base-X, inter-converting electrical signals of 10Base-T/100Base-TX/1000Base-T twisted pairs with optical signals of 100/1000Base-SX/LX. It extends the transmission distance of network from 100 m via copper cable to 120 km via fiber optical cables. It supports transmission in multimode duplex fiber, single mode duplex fiber and single mode single fiber.

#### Features:

- Rugged design for use in harsh environments
- Small compact box
- 10/100/1000BASE-T to 100/1000BASE-X converter
- FO interface: HMA Expanded Beam or LEMO FXW 3K.93C
- Full operation wavelength spectrum available
- Distance SM fiber up to 120 km
- UTP port: MRJ or multipin D38999 connector
- Support Jumbo Frame 9K Packet
- 5 to 15 V DC power supply



LMC-01.GM with HMA-J connector

#### Specification:

Access mode	10/100/1000 Mbps Gigabit Ethernet
Standard	IEEE802.3 10Base-T Ethernet, IEEE802.3u 100Base-TX/FX Fast Ethernet, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-SX/LX Gigabit Ethernet
Fiber Port	HMA-J Expanded Beam connector or LEMO FXW 3K.93C ferrule connector
UTP Interface	D38999/20WD18SN 18-pins connector <sup>2</sup> : data transmission & power supply or MRJ data transmission & USB power supply
Wavelength	MM: 1300 nm, SM: 1260 – 1630 nm
Transmission distance	UTP cable (10/100/1000Base-T): 100 m MM fiber optic cable, full duplex: 2 km SM fiber optic cable, full duplex: up to 120 km
LFP	Not Support
BER	<10 <sup>-9</sup>
MTBF	100,000 hours
LED indicator	PWR (Power supply) TX (LINK 100/1000, TP cable rate 100/1000M) FX/ACT (Optical link action /TP cable packet forwarding action)
Power supply	USB or DC 5 to 15 V
Environmental Temperature Humidity	According to ČOS 999905 (AECTP-300) Operating: -30°C to +50°C, Storage: -40°C to +70°C 10% to 95%
Mechanical	ČOS 999902 (AECTP-400, MIL-STD 810G), IP63 protection
EMC	ČOS 599902 (MIL-STD-461F)
Weight	290 g with LEMO connector 320 g with HMA connector
Dimensions (L x W x H)	150 x 45 x 45 mm case



LMC-01.GM with LEMO SMPTE connector



LMC-01.GM with HMA-J connector

### Ordering Code:

<b>LMC-01.GM</b>	-	<b>XX</b>	-	<b>XXX</b>	-	<b>XX<sup>2</sup></b>	-	<b>DC/P18<sup>3</sup> USB/MRJ<sup>4</sup></b>
<b>1G converter</b>		<b>XX – Fiber Type</b> <b>M5:</b> MM 50/125 μm <b>M6:</b> MM 62.5/125 μm <b>S3:</b> SM 9/125 μm, 1310 <sup>5</sup> nm <b>S5:</b> SM 9/125 μm, 1550 <sup>5</sup> nm				<b>XX – Distance<sup>5</sup></b> <b>XX:</b> MM <b>10:</b> 10 km – SM <b>30:</b> 30 km – SM <b>50:</b> 50 km – SM		<b>Power Supply</b> <b>DC:</b> 5 - 15 V DC <b>USB:</b> USB  <b>UTP port</b> <b>MRJ:</b> MRJ – RJ-45 connector <b>P18:</b> D38999 multipin connector
		<b>XXX – Connector type<sup>1</sup></b> <b>HMA</b> HMA-J expanded beam connector <b>FXW</b> LEMO FXW 3K.93C <b>FCON</b> Ferrule rugged connector <b>HE</b> HE-IP67 connector <b>DM4-38</b> Diamond MIL 38999 FO connector <b>DM4-83</b> Diamond MIL 83526 FO connector						

- Note: 1) FO interface: other connector on request  
 2) MM fiber – the distance depends on fiber type, up to 2 km, SM fiber – longer distance on request  
 3) P18: LAN and power supply in one 18-pins connector  
 4) MRJ: LAN RJ-45, power supply – USB  
 5) Other SM wavelengths and distance on request  
 6) Appropriate cables available on request