

# OM10G

10M to 10GBASE-T Copper  
to  
1G to 10GBASE-R Fiber

Industrial Ethernet Media Converter



## Description

- Ethernet media converter for standard N-BASE IEEE copper rates.
- Converts 10/100/1000/2.5G/5G/10GBASE-T copper to 10GBASE-R fiber.
- Converts 5GBASE-T copper to 5GBASE-R fiber.
- Converts 2.5GBASE-T copper to 2.5GBASE-X fiber.
- Converts 1000BASE-T copper to 1000BASE-X fiber.
- Converts 10/100/1000BASE-T copper to SGMII fiber.
- Converts 10/100/1000/2.5G/5G/10GBASE-T copper to USXGMII fiber.
- Multimode fiber, singlemode fiber, and DAC cable support.
- Unidirectional fiber mode for monitoring applications.
- Link-pass-through enables link failure detection at remote nodes.
- Console status displays extensive status information and MIB statistics.
- The rugged metal case ensures low radiated and conducted emission.
- Industrial electronic components for reliability and extended temperature operation.

## Features

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| <ul style="list-style-type: none"> <li>• Fiber speeds of 1, 2.5, 5, 10G</li> <li>• Fiber distances up to 80 km</li> <li>• Optical strength bar graph</li> <li>• Jumbo packet support</li> <li>• Flow control</li> <li>• Rack mountable</li> </ul> | <ul style="list-style-type: none"> <li>• Plug and play or manual configuration</li> <li>• Power/Link fail alarm relay</li> <li>• Redundant power supply inputs</li> <li>• Industrial temperature -30°C to 70°C</li> <li>• 8 to 30 VDC power input.</li> <li>• 5 Year warranty</li> </ul> |
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## Management Interface

For plug-and-play operation the copper data rate may be set using the front panel dip switches, in which case the fiber rate is 10GBASE-R.

Other fiber rates and more advanced features are available using the USB management interface.

# Specifications<sup>1</sup>

## Optical

SFP+ MODULE	802.3 SPECIFICATION	LASER WAVELENGTH NM	FIBER SIZE μM	TX OUTPUT> DBM	RX SENSITIVITY< DBM	OPTICAL <sup>2</sup> RANGE> KM
10G-SR	10GBASE-SR	850	OM3	-6	-11.1	0.3
10G-LR	10GBASE-LR	1310	9/125	-8	-14.4	10
10G-ER	10GBASE-ER	1550	9/125	-1	-16	40
10G-ZR <sup>3</sup>	10GBASE-ZR	1550	9/125	0	-23	80
10G-BXU <sup>4</sup>	Proprietary (single fiber)	1330	9/125	-2	-14	10
10G-BXD <sup>4</sup>	PROPRIETARY (single fiber)	1270	9/125	-2	-14	10

**1** Specifications subject to change.

**2** Typical fibers.

**3** The optical receive will overload with this SFP+ on short fibers. Fibers <45km it require an attenuator.

**4** The single-fiber SFPs must be used as complimentary pairs (one BXU and one BXD).

## Electrical

Data I/O levels .....	IEEE 802.3 compatible
Data I/O connector .....	RJ45
Power inputs to modem .....	8.4 to 30 VDC
Power inputs to desk top power supply .....	100-240Vac, 50-60 Hz
Power consumption typical at 10GbE .....	6 Watts
Alarm relay: Current continuous/peak .....	125/350 mA
Voltage AC or DC .....	60V peak

## General

Operating temperature .....	-40°C to 70°C
Humidity (RH) .....	10% to 95%
MTBF .....	> 50,000 hours
Dimensions .....	11.2 x 2.4 x 8 cm

## Ordering Information

### PN: OM10G-0

A 6' USB console cable is included.

A 24 VDC out, 100-240Vac, 50-60 Hz input desk top supply with a N. American power cord is included.

**SFP optics** are specified separately using the *SFP Module* name.

**PN: DIN-CLIP-1** allows an OM10G to be snapped to 35mm or G-type DIN rail.

**PN: MP05** holds up to three OM10Gs, and takes 1U space in a 19" rack.

**PN: MB05** The Mounting Base is screwed to a flat surface and holds one OM10G

More information on these accessories can be found at [www.luxcom.com](http://www.luxcom.com)