

OM1G-PD

Industrial Ethernet Transceiver
 1000BASE-T to 1000BASE-X
 100BASE-TX to 100BASE-X
 Can be powered using PoE or a power cube

Applications

Converts Ethernet RJ45 ports to optical ports
 Low Latency for use in AVB networks
 PoE powered option reduces power cube clutter



Description

- Managed Ethernet Media Converter.
- 1000BASE-T to 1000BASE-X and 100BASE-TX to 100BASE-X.
- 10/100/1000BASE-T to SGMII.
- Uses standard SFP optical modules.
- Can be powered using a power cube or PoE.
- LED bar graph shows received optical power.
- USB console interface.
- Compact rugged metal enclosure.

Features

- Single or multimode fiber
- Distances up to 100 km
- PHY based for optimum security
- Low latency for AVB
- IEEE 802.3at compatible PD
- Plug and play operation
- Link-Pass-Through support
- Jumbo packet support
- Easy setup
- DIP switch and console configuration
- Surge protection on RJ45
- Industrial temperature range
- 5 Year warranty

Power Source

If the RJ45 port is connected to IEEE 802.3af/at/bt power sourcing equipment, the modem will classify and be powered as a PoE Class 1 device. Alternately it may be powered using a 24 to 54V power cube. In this case, the cube overrides the Ethernet source.

DIP Switch Settings

Four DIP switches control the modem's transmission speed, operation mode and link-pass through. Microprocessor mode (μ P) is used to select the configuration setup with the management interface.



Management Interface

The USB console interface can be used to view Ethernet and SFP status. It can also be used to define a custom configuration for use in μ P mode. There are three media converter and two SGMII operating modes. These modes are configurable using common and custom option menus. For example, MDI/MDI-X can be configured for all modes.

Specifications

Optical

See 100BASE or 1000BASE optics in <https://www.luxcom.com/product/sfp/>.

General

Operating temperature	-30°C to 70°C
Humidity (RH)	10% to 95%
MTBF	> 50,000 hours
Dimensions	10 x 6.4 x 2.2 cm

Electrical

Data I/O levels	IEEE 802.3 compatible
PoE voltage on RJ45	48V to 56V DC
Voltage input to rear connector	24V to 54V DC
Power consumption	< 2.5 Watts
PoE load class	Class1

Ordering Information

The modem and SFP are separate order items. For a PoE Power Sourcing device with similar functionality, consider the OM1G-PSE.

Modem part number: **OM1G-PD** comes with a power cube
OM1G-PDx comes without a power cube

SFP optic part number:
Choose a 100BASE or 1000BASE SFP from <https://www.luxcom.com/product/sfp/>.

Accessory part numbers:

DIN-Clip-5 allows the modem to be snapped to a DIN rail.

See <https://www.luxcom.com/product/mounting-clip-din-clip-5/>

MC-OM101 mounts an modem on a flat surface.

See <https://www.luxcom.com/product/mounting-clip-mc-om101/>

MP5 panel holds six modems in a 19" rack.

See <https://www.luxcom.com/product/mounting-panel-mp5/>

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