



INDUSTRIAL POF MEDIA CONVERTER

DM-1001-I
FAST ETHERNET

The future of networking is here

The DiMoto DM-1001-I is a high-performance industrial-grade Plastic Optical Fibre (POF) media converter interfacing standard 10/100BaseT(X) to 100BaseFX Ethernet over Plastic Optical Fibre.

The DM-1001-I device enables standard Ethernet devices to be interfaced into a Ethernet over Plastic Optical Fibre network, or alternatively, two DM-1001-I units can be used as a pair to create a robust point-to-point optical link.

The DM-1001-I device features the Optolock® POF connector for plugless termination of bare plastic optical fibre, redundant power inputs and an operational temperature range of 0 - 60°C.

EoPOF Overview

Ethernet over Plastic Optical Fibre is a simple, secure and high performance alternative for industrial networking applications, delivering 100Mbps at over 70 meters.

All Dimoto's products incorporate a plugless termination system, enabling bare POF to be cut to length on-site and securely terminated in seconds.

EoPOF networks can be confidently deployed where electrical noise, ground potential variations or lightning is of concern. The robust properties of POF combined, immunity to interference, ease of installation and simple maintenance makes DiMoto's EoPOF networks ideal for keeping your industrial automation applications running continuously.



DiMoto's EoPOF Industrial Media Converter: **DM-1001-I**.

PRODUCT FEATURES

- **Terminate in seconds:** POF can be cut to length on-site and terminated in seconds.
- **Inter operability:** enables the connection of any 10/100 copper Ethernet device to be connected to an EoPOF network.
- **Wide range redundant power inputs:** 12-48 volt dual power inputs support existing industrial DC power supplies.
- **Extended temperature range:** reliable operation in harsh industrial environments.
- **Simple, safe connection test:** a 660nm red LED, safe to the naked eye, signals a connected device.
- **Data Integrity:** EoPOF is immune to the effects of electrical noise, ground potential variations and lightning induced voltage spikes on data lines.
- **Robust Industrial Design:** the DIN rail mounting IP30 metal case protects your media converter from the industrial environment.

**Ethernet over Plastic Optical Fibre:
See the world of networking in a whole new light.**



PRODUCT SPECIFICATIONS

Network Ports

1x 100BaseFX OptoLock® POF Ports
1x 10/100Base T(X) RJ-45 Ports

Standards Compliance

IEEE 802.3i 10BASE-T Ethernet
IEEE 802.3u 100BASE-TX 100BASE-FX
IEEE 802.3x Full Duplex and Flow Control

Switch Specifications

Technology: Store and Forward
Frame Memory: 128KB
Address Table: 2048

Optical Specifications

Source Type: RCLED
Wavelength: 660 nm nominal (Red)
Max. Tx Output: -2.0dBm
Min. Tx Output: -8.5dBm
Min Rx Sensitivity: -24dBm
Max Rx Sensitivity: -28.0dBm
Min Optical Link Budget: 15.5dBm
Max Distance: 70m (recommended & dependent on fibre)

Environmental Specifications

Operating Temperature: 0°C to 60°C (32 to 140°F)
Storage Temperature: -40°C to 100°C (-4 to 185°F)
Operating Humidity: 5% - 90% RH non condensing

Mechanical Specifications

Casing: IP30 Metal Enclosure
Dimensions (WxDxH): 110x65x30mm
Weight: 250g
Mounting: DIN Rail Mount Kit

Power Specifications

Connection: Screw Terminal Block
Input Voltage: 12-48VDC
Device Power: 1.5W
Redundant Power Inputs
Reverse Polarity Protected Inputs

Regulatory Approvals

Safety (LED Source): IEC/EN 60825-1
EMI, EMC: CE, FCC, C Tick

Warranty

5 Years (return to base)

Package Contents

1x Media Converter
1x POF Cutting Tool
1x DIN Rail Mounting Kit
1x Installation Guide
1x Warranty Card

DiMoto Related Products

DM-PCI: POF PCI Adapter
DM-USB: POF USB Adapter
DM-1002-I: Industrial POF Media Converter/Switch
DM-1004-I: Industrial 4-Port POF Network Switch
DM-1008-I: Industrial 8-Port POF Network Switch

Order Information

DM-1001-I-OPT

Notes

SMI POF connectors available on request. Please contact sales for details and minimum order quantities.

Contact DiMoto

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DiMoto Pty Ltd designs, develops and markets Ethernet over Plastic Optical Fibre (EoPOF) networking devices and solutions worldwide.

DiMoto is a member of the leading Plastic Optical Fibre body, the Plastic Optical Fibre Trade Organization (POFTO).

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