

## INDUSTRIAL 4 PORT and 8 PORT SWITCH

### The future of networking is here.

Ethernet over Plastic Optical Fibre is the next generation of networking and cabling technology, promising superior quality of service, easy installation and significant cost savings.

Ethernet over Plastic Optical Fibre (EoPOF) is the latest innovation to emerge for high-volume ethernet applications in the industrial and commercial sectors.

Di Moto's Industrial 4 Port and 8 Port Switch directs data traffic between your devices over an Ethernet network, connecting your business to the benefits of plastic optical fibre. (See overleaf for product specifications.)

The compact and sturdy switch simply plugs into POF cable with zero configuration, providing instant connection to fast Ethernet of 100Mbps over Plastic Optical Fibre.

For businesses investing in new or retrofitted networks, Plastic Optical Fibre offers cost savings in both infrastructure and installation.

POF is a fraction of the cost of glass optical fibre, and is cheaper to install than copper cabling. The greatest savings lie in the fast installation and connection of the network - POF cable can lie next to power sources, withstands greater vibration, and is thinner and more flexible in tight spaces.

Plus, simple scissors can be used to terminate connections and a 650nm red LED, safe to the naked eye, signals a connected device, meaning that no specialist equipment or expertise is required.

EoPOF also promises greater network security, as POF cable is difficult to tap without being detected.

The long-term savings come via performance: with EoPOF's electrical immunity, downtime and data corruption due to electrical interference is no longer an issue.

High-speed and highly reliable transportation of data is ensured, meaning quality of service is practically guaranteed from the factory floor to the office.

Now industry can benefit from the reliability, security and economy of Ethernet over Plastic Optical Fibre.

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



Industrial 8 Port and 4 Port Switches: DM-1008 (left) and DM-1004 (right).

### PRODUCT FEATURES

- **Wide of range of redundant power inputs:** 12-48 volt dual power inputs support existing industrial DC power supplies.
- **DIN Rail Mount:** slim packaging mounts to your existing DIN rail installations.
- **Extended temperature range:** reliable operation in harsh industrial environments.
- **Ethernet over Plastic Optical Fibre connectivity:** connects your computers, RTUs, PLCs and other EoPOF enabled devices to the operating benefits of Plastic Optical Fibre
- **Compatibility:** connects up to 4 or 8 Ethernet devices such as routers, PCs, servers, RTUs and PLCs.
- **High bandwidth:** powerful performance up to 200Mbps, supporting all current and future Triple Play services.
- **Simple, safe connection test:** a 650nm red LED, safe to the naked eye, signals a connected device.
- **Safe from lightning strike:** Plastic Optical Fibre does not conduct electricity, keeping your Ethernet devices safe from being destroyed by power surge via the network cable.
- **Sturdy and quiet:** the all-metal case protects your switch from the industrial environment.

# PRODUCT SPECIFICATIONS

## Network Ports

DM-1004: Four Fibre ports

DM-1008: Eight Fibre ports

OPT – OptoLock Connectorless System

## Standards Compliance

IEEE 802.3u 100BASE-FX Fast Ethernet

IEEE 802.3x Full Duplex and Flow Control

## Performance Specifications

Switch Modes: Store and Forward

Internal Backplane bandwidth: Full wire speed on all ports simultaneously

Maximum distance: 100 metres with 0.3NA POF

Frame Memory: 128KB

Address Table: 2048

Noise 0dB

## Optical Characteristics

Type: LED

Wavelength: 650 nm nominal (Red)

Maximum Output Power: -2.0 dBm

Minimum Output Power: -8.5 dBm

Sensitivity: -24.0 dBm

Maximum Input Power: -2.0 dBm

Link Power Budget: 14.5 dB

## Environmental Specifications

Operating Temperature: 0°C to 60°C

Storage Temperature: -40°C to 100°C

Operating Humidity: 90% RH non condensing

Storage Humidity: 95% RH non condensing

## Status LEDs

Power: Red

Link: Yellow

Activity: Green

## Power

DM-1004 - 4W 12-48VDC

DM-1008 - 6W 12-48VDC

Redundant Power Inputs

Reverse Polarity Protected Inputs

Screw Terminals

## Mechanical Specifications

All Metal Enclosure

DM-1004 Dimensions (WxDxH): 120mmx75mmx30mm

Weight: 350g

DM-1008 Dimensions (WxDxH): 200mmx75mmx30mm

Weight: 450g

## Regulatory Approvals

CE

FCC

C Tick

## Warranty

12 Months

## Package Contents

1x Network Switch

1x Manual

1x Warranty Card

## Di Moto Related Products

PCI Ethernet Card DM-PCI

1 Port Media Converter DM-1001

2 Port Media Converter DM-1002

USB Adapter DM-USB

Fibre Optic Cable 0.3NA

DIN Rail Mount Kit DM-DINKIT

## Order Information

DM-1004-I-OPT

DM-1008-I-OPT



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## ABOUT DI MOTO

Di Moto is opening the gateway to new and improved networking and cabling technology. Di Moto Pty Ltd designs, develops and supplies Ethernet over Plastic Optical Fibre (EoPOF) networking devices worldwide.

The company's mantra is technology in motion – creating plastic optical fibre ethernet networking solutions.

Di Moto is a member of the leading plastic optical fibre body, the Plastic Optical Fiber Trade Organization (POFTO), and all Di Moto products are ROHS compliant.