

# 10/100/1000Base-T to 100/1000Base SFP Ethernet Media Converter PoE Powered Device

MX-1G-PD

#### **FEATURES:**

- ◆ SFP Port 100/1000Base Auto Sensing
- ◆ Ethernet 802.3af Class 1 PoE Powered
- ♦ Auxiliary 48 VDC Power Input
- ◆ Auto MDI / MDIX Detection
- ◆ Auto Negotiate 10/100/1000 Port
- Link and Activity Indicators for UTP and Fiber Ports
- Port Configuration Switches
- ◆ Active Link Pass Through LPT
- ♦ Jumbo frames Support
- ◆ AVB Audio Video Bridging Support
- ◆ Lifetime Warranty

## SPECIFICATIONS:

#### Ethernet:

Data Rate
Auto negotiated .......10/100/1000 Mb/s
Connector......RJ45

### **Configuration Switches:**

SW1: Auto-Negotiation TP On/Off
SW2: Speed TP: Force 10Mb or 100Mb
SW3: Duplex TP: Force Half or Full
SW4: 1000Base-X / SGMII Mode
SW5: 100Base-FX / 1000Base-X Mode
SW6: Duplex Fiber: Force Half or Full

SW7: PSE Power On/Off SW8: PSE/LPT On/Off

SW9: Link Pass Through LPT On/Off

SW10: PoE Legacy On/Off

#### Optical:

SFP (ordered separately, see SFP datasheet) 100Base-FX/1000Base-X

#### Power:

Voltage	42 to 56 VDC
Power PoE Class 1	<3.85W
Aux Power Connector	2.1 x 5mm Barrel
Center Positive, Reverse Polarity Protected	
PS-4820 Power Supply Included	

#### **Environmental:**

Operating Temperature	0 °C to 40 °C
Humidity	5 % to 95 %
Weight	1lb
	HS, CE, FCC Part 15, UL
Warranty	Lifetime

# Dimensions: ...... 41/4" x 41/4" x 11/8"

# Ordering Information

MX-1G-PD
SFP Ordered Separately
LC Optical Connectors Standard on SFPs

11/23 JPM



ISFP NOT INCLUDED!

The American Fibertek Series MX-1G-PD transmits and receives a 10/100/1000Base-T Ethernet signal at the RJ45 port and a 100 Base-FX or 1000Base-X at the fiber port over 1 or 2 single-mode or multi-mode fibers using an SFP optical component. The SFP optic is ordered separately (see AFI SFP datasheet). Diagnostic indicators provide a quick visual indication of system status.

The system is designed to be completely transparent with an auto negotiation feature which automatically configures the unit for the correct speed (10/100/1000Base-T). Auto MDI/MDIX operation eliminates the potential need for crossover cables. However, data configuration switches are available to force the system into specific operating modes if required.

The Series MX-1G-PD is powered by a PoE switch or mid-span injector from the RJ45 port over the copper connection. The device may also be powered by an included 48 Volt power source. A PS-4820 power supply is included.

The Series MX-1G-PD also supports active 'Link Pass Through LPT'. With LPT, the media converter monitors both the fiber and copper RX (receive) ports for loss of signal. If there is a loss of a RX signal on one of the media's ports, the media converter will automatically disable the TX (transmit) signal of the media converter's other port. Upon installation and power up, the active LPT feature is suspended until both the copper and fiber links have been established which assists in troubleshooting initial connection issues.

The benefit of LPT is that the fiber link can act as a transparent copper connection where both end devices are able to see a loss connection and, if managed, send an SNMP alert so that corrective action can take place.

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