10/100/1000Base-T to 1000Base-X SFP Ethernet Media Converter with PoE and Link Pass Through

MX-1G-PoE-BC SERIES

FEATURES:

- SFP Port 1000 Base Fiber
- IEEE 802.3, 802.3af and 802.3at Compliant
- Auto MDI / MDIX Detection
- Auto Negotiate 10/100/1000 Port
- Link and Activity Indicators for UTP and Fiber Ports
- Data Configuration Switches
- Active Link Pass Through LPT
- Supports Jumbo frames
- Lifetime Warranty

SPECIFICATIONS:

Ethernet:
Data Rate
Auto negotiated ....10/100/1000 Mb/s
Connector RJ45
PoE (RJ45 port)……………....…15W 802.3af
PoE+ (RJ45 port)..………………30W 802.3at

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 .... 48 to 56 VDC
Power(without PoE power supplied)……5 Watts max
Connector ...2.1 x 5.5mm Barrel, Center Positive

Environmental:
Operating Temperature .... -40 °C to 75 °C
Humidity...................................... 5 % to 95 %
Weight………………………………………2 lbs
Compliance…….RoHS, CE, FCC Part 15, UL
Warranty………………….………….Lifetime

Dimensions:.... ……………..4¼" x 4¼" x 1⅛"

Ordering Information
MX-1G-PoE-BC   (No optical SFP included)
Recommended power supply: PS-4860B

[SFP NOT INCLUDED]

The American Fibertek Series MX-1G-PoE 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-PoE sources PoE or PoE+ power to devices from the RJ45 port over the copper connection. The RJ45 port delivers 802.3af (15 watts) or 802.3at (30 Watts) to PD (powered devices). Power supplies are ordered separately.

The Series MX-1G-PoE 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.