



Industrial 10/100M Ethernet to Fiber Optic Converter

Part Number: MT8110-F-G (DIN-Rail/Wall-Mount)

Single-Mode (12.4miles/20km) or Multi-Mode (3miles/5km)

Connector types: ST, SC or FC

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■ INTRODUCTION

MT8110-F-G (DIN-Rail/Wall-Mount) is a rugged, industrial-grade 10/100M Ethernet to fiber optic media converter, which provides one channel for media conversion between 10/100BaseTX and 100BaseFX fiber optic links. MT8110-F-G works in pair (point to point) and it runs on a light-speed fiber backbone inherently resistant to radio and electrical interference, such as EMI/RFI, transient surges, and ground loops. Depending on the fiber cable and the type of media converter used, a single-mode media converter can extend the 10/100M Ethernet's distance to 12.4 miles (20 km), while a multi-mode media converter can extend the 10/100M Ethernet's distance to 3 miles (5 km). MT8110-F-G is a plug and play unit featuring auto-negotiation for half or full-duplex and 10 or 100Mbps data rates, it also supports MDI (straight-through) and MDIX (crossover) cables, no DIP switch or jumper settings are required.

■ FEATURES

- Enclosed in a rugged, rustless ABS housing.
- Direct DIN-Rail or wall/panel mounting without using any unsecured brackets or adapters.
- Converts 10/100BaseTX to 100BaseFX fiber optic links.
- Transmits 10/100M Ethernet data over a long distance through fiber cables.
- Auto-negotiation of speed and duplex mode on TX port.
- Auto-MDIX on TX port.
- Store-and-forward mechanism.
- Single or Multi-mode, with ST, SC or FC connectors.
- Built-in surge protection, static protection and circuit protection.
- Surface Mount Technology manufactured to RoHS and ISO-9001 standards.
- 5 Year manufacturer's warranty.

■ SPECIFICATIONS

Compatibility:	IEEE802.3 10Base-T; IEEE802.3u 100Base-TX and 100Base-FX
Power Source:	9 to 30VDC (External AC to DC power adapter included)
External AC/DC Power Adapter:	9VDC/500mA (Input: 100~240VAC 50/60Hz, US type A plug)
Features:	Auto-negotiation for half/full-duplex and 10/100M on TX port; Auto-MDIX on TX port
Switching Method:	Store-and-forward
Speed:	10BaseT: 10/20Mbps for half/full-duplex 100BaseT: 100/200Mbps for half/full-duplex
Current Consumption:	Less than 200mA
Wavelength:	1310nm
Output Power (Fiber):	Single-Mode: -15dBm(Min); -10dBm(Typ); -8dBm(Max) Multi-Mode: -15dBm(Min); -10dBm(Typ); -8dBm(Max)
Sensitivity (Fiber):	Single-Mode: -34dBm; Multi-Mode: -34dBm
Usable Fiber Optic Cables:	Single-mode: 8.3/125, 8.7/125, 9/125, 10/125µm Multi-mode: 50/125, 62.5/125µm
Distance (Ethernet):	10BaseT: Cat. 3, 4, 5 up to 328ft (100m) 100BaseT: Cat. 5 up to 328ft (100m)
Distance (Fiber Lines):	Single-mode: 12.4 miles (20km); Multi-mode: 3 miles (5km)
Connectors (Ethernet/Power):	RJ45 (Female) / Terminal Block (9-way)
Connectors (Fiber Links):	ST Connector, SC Connector or FC Connector
Surge Protection:	600W
Electro-Static Discharge (ESD):	Up to 15KV
Dimensions (H x W x D):	ST: 4.9 x 2.9 x 1.3 in (125 x 73 x 33 mm) SC: 4.7 x 2.9 x 1.3 in (120 x 73 x 33 mm) FC: 4.6 x 2.9 x 1.3 in (117 x 73 x 33 mm)
Weight:	ST: 4.6 oz (130 g) / SC: 4.6 oz (129 g) / FC: 4.6 oz (129g)
Operating Temperature:	-20°C to 70°C
Operating Humidity:	0 to 90% Non-condensing

■ CONNECTIONS

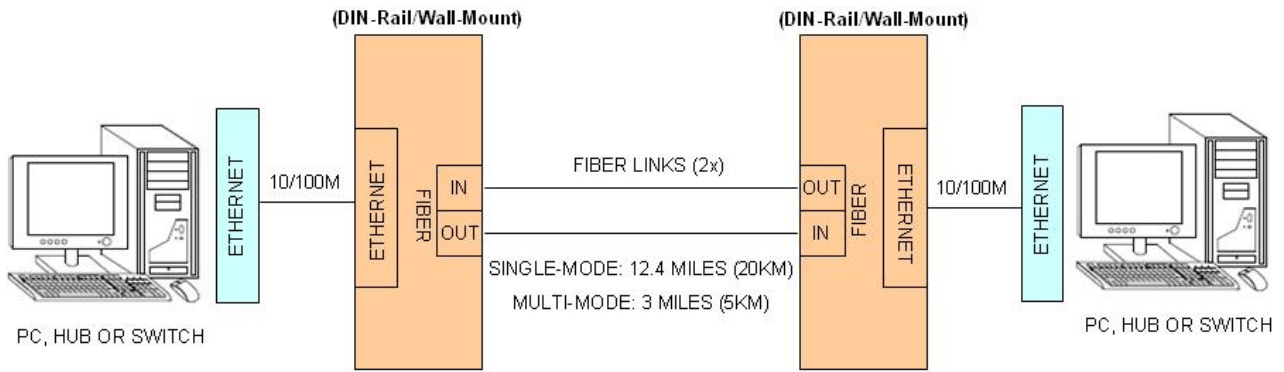
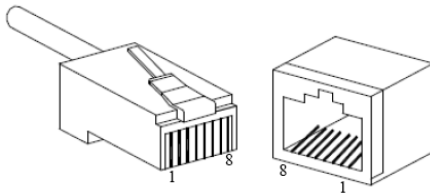


FIGURE 1: CONNECTION DIAGRAM

■ RJ45 / TERMINAL BLOCK PIN ASSIGNMENT



RS45	Terminal Block
1	TX+
2	TX-
3	RX+
6	RX-
4,5,7,8 (Not Connected)	-

■ INSTALLATIONS

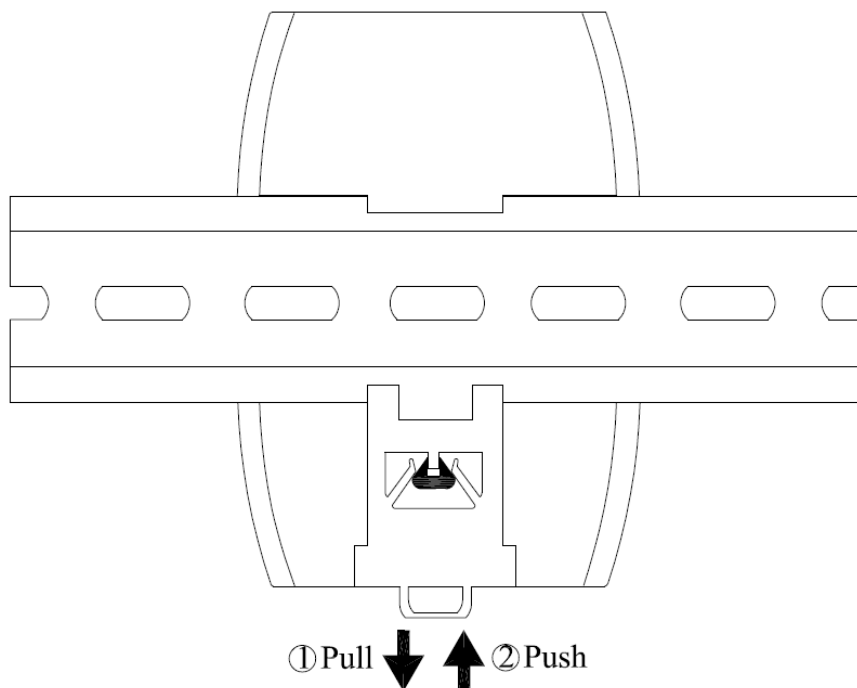


FIGURE 2: DIN-RAIL MOUNTING

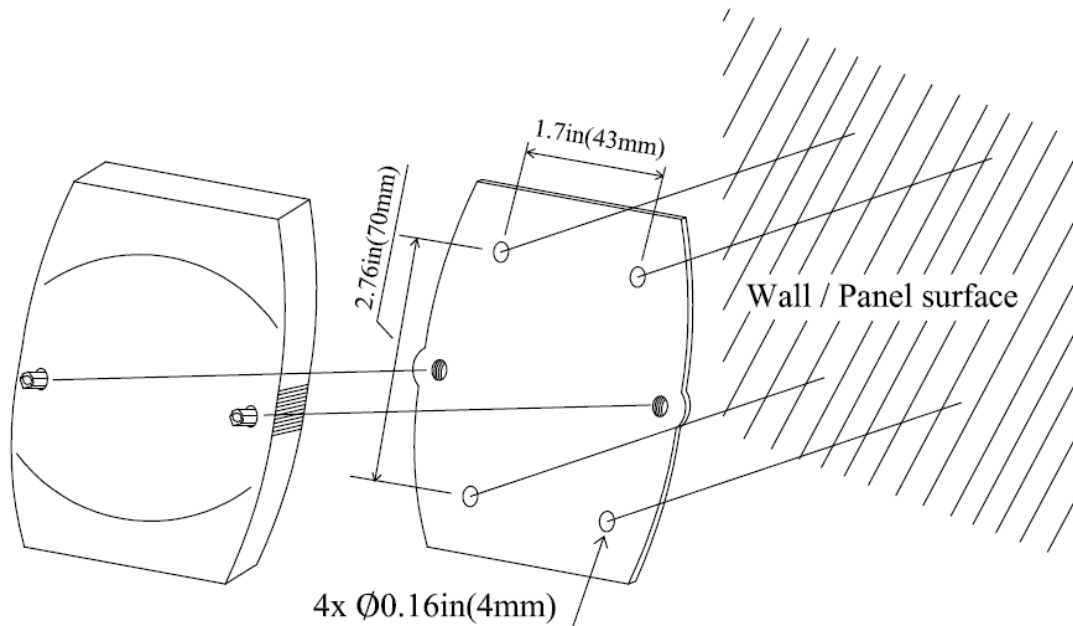
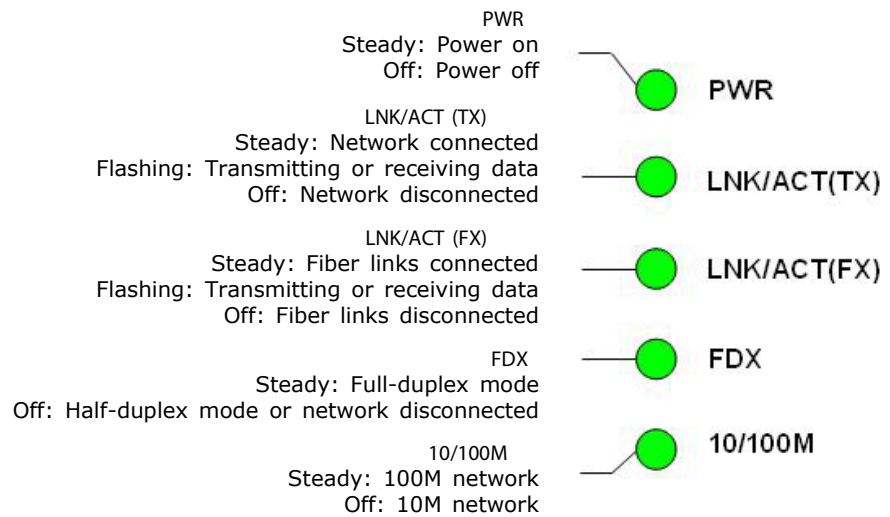


FIGURE 3: WALL/PANEL MOUNTING

LED INDICATIONS (FRONT VIEW)



TROUBLESHOOTING

Make sure the Power is connected and turned on.

Check the connections according to the above "CONNECTIONS" diagram (Figure 1).

Check the LED status and identify the possible problems by using the table below:

LED	State	Indication
PWR (Power)	Steady	Power on
	Off	Power off
LNK/ACT (TX) (TX Port Link/Activity)	Steady	Network connected
	Flashing	Transmitting or receiving data
	Off	Network disconnected
LNK/ACT (FX) (FX Port Link/Activity)	Steady	Fiber links connected
	Flashing	Transmitting or receiving data
	Off	Fiber links disconnected
FDX	Steady	Full-duplex mode
	Off	Half-duplex mode or network disconnected
10/100M	Steady	100M network
	Off	10M network or network disconnected

