# **Ethernet Media Converter Copper to Fiber Optic**

## **General Description**

The TX2FX is an Ethernet media converter that translates transmission signals from a twistedpair 10/100/1000Base-TX cable to a 100Base-FX or 1000Base-X fiber optic cable. It expands network data transmission distances beyond the 100 meter limitation of copper wire to over 10 kilometers by using single-mode fiber optic cable.

For the fiber optic port any standard Small Form factor pluggable (SFP) transceiver module can be used on the TX2FX. These SFP transceivers modules are available with a variety of different transmitter and receiver types, allowing users to select the appropriate transceiver for the required fiber optical interface.

Further the TX2FX provides automatic detection and initializing of the SFP Module and has easyto-read diagnostic LEDs for continuous status reports on network speed, traffic and fiber optic port status.





TX2FX-14 with 2 copper (RJ45 &



# **TX2FX Highlights**

- Triple Speed (10/100/1000MBit) Copper Ethernet Interface
- Automatic detection and initializing of the SFP Module (100MBit-FX or 1000MBit-X over standard SFP Module)
- Single wide Power Supply input (5 to 36VDC)
- Copper on RJ45 or lockable header
- Extended temp. option -40°C to +85°C
- Configurable Flow Control, Link Loss Forwarding and Link Speed Forwarding
- Jumbo Frame supported
- Variants with two copper ports + SFP
- Can be a switch (TX2FX-13/14 only)

All MPL products are 100% designed and manufactured in Switzerland.

If you need a 3D STEP file for the TX2FX, please contact us.

# **Board Key Data**

Copper Port on RJ45 (10/100/1000Mbit) or 2mm header

supports auto crossover, polarity correction

over standard SFP transceivers, supports single- and Fiber Optic Port

multi-mode, 100Mbit-FX or 1000Mbit-X

Status LEDs 2 LEDs for each RJ45 port / 1 LED for SFP port

## Physical / Power

Size (L x W x H) 75.7 x 50.0 x 16.0 mm Power 5VDC to 36VDC

Power consumpt. 1.8W 1Gbit copper & 1Gbit optical link

2.5W 2x 1Gbit copper & 1x 1Gbit optical link

# Environment

TX2FX-11RH

Temp. Range standard -20°C to 60°C, optional -40°C to 85°C 5 - 95% non condensing, optional coating available Humidity

#### SFP (optical transceiver) in stock

Switzerland

2/1Gbit 850nm, multi mode, up to 500m, -40 to +85°C SFP-1X SFP-2X 1Gbit 1310nm, single mode, up to 10km, -40 to +85°C 100Mbit 1300nm, multi mode, up to 4km, -40 to +85°C SFP-3X or any other standard SFP in accordance to MSA & Ethernet compatible

## **TX2FX Versions**

Product: TX2FX Media Converter

| Family: |           |
|---------|-----------|
| 1       | 1x Family |

Copper Ports Connector: (blank) Vertical header RH Right angled header

| Options: |  |
|----------|--|
| 1        | 1 copper port on same side as the SFP port |
| 2        | 1 copper port on opposite of the SFP port  |
| 3        | 2 copper ports                             |
| 4        | 2 copper ports                             |
|          | RJ45 on SFP side, header on opposite side  |

MPL AG is an ISO9001 certified company

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