

# TX2FX

## Ethernet Media Converter Copper to Fiber Optic

### General Description

The TX2FX is a Ethernet media converter that translates transmission signals from a twisted-pair 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 ten 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.

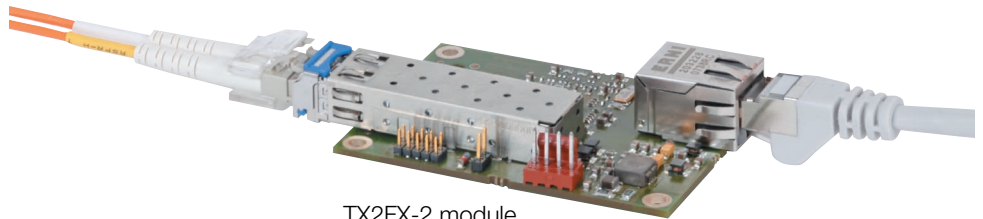
Further the TX2FX provides automatic detection and initializing of the SFP Module and has easy-to-read diagnostic LED's for continuous status reports on network speed, traffic and fiber optic port status.

### TX2FX specialties

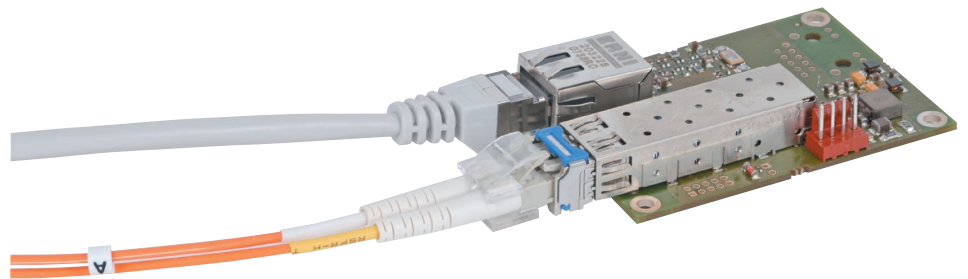
- Triple Speed (10/100/1000MBit) Copper Ethernet Interface
- Automatic detection and initializing of the SFP Module (100Base-FX or 1000Base-X over standard SFP Module)
- Single wide Power Supply Input (5 to 28V)
- 2 different mechanical versions
- Extended temperature option
- Configurable Flow Control
- Configurable Link Loss Forwarding and Link Speed Forwarding

### Those features make

TX2FX ideally suited for industrial applications. TX2FX helps to expand your network distances!



TX2FX-2 module



TX2FX-1 module

### Board Key Data

Copper Port	on RJ45 (10/100/1000Mbit) supports auto crossover, polarity correction
Fiber Optic Port	over standard SFP transceivers supports single- and multi-mode, 100Mbit or 1Gbit
Status LEDs	2 LEDs for each RJ45 port 2 LED for each SFP port

### Physical / power

Size (length x width x height)	75.7 x 50.0 x 16.0 mm version TX2FX-1 78.7 x 50.0 x 16.0 mm version TX2FX-2
Power	+5VDC up to + 28VDC
Power consumption	Typically 1.5W 100Mbit copper link Typically 2.5W 1Gbit copper links
Temperature Range	standard -20°C up to 60°C, optional -40°C up to 85°C
Humidity	5% - 95% non condensing, optional coating available

### TX2FX versions

Product number	Assembly Version	Mechanical Version	
		RJ45 and SFP on same side	RJ45 and SFP on opposite sides
TX2FX-1	Stand alone	X	
TX2FX-2			X
TX2FX-1M	Built-in rugged embedded PC (PIP)	X	
TX2FX-2M			X