## F-FE-TR

Enhanced 10/100Base-TX to 100Base-FX Media Converter

## Product Introduction \& Benefits

## F-FE-TR

The Thor Fiber F-FE-TR media converter is a cost-effective, feature-packed solution for expanding or extending an existing Ethernet/ Fast Ethernet network. Thor's compact converter is enhanced with features like remote and local loop back testing, auto-negotiation, and link fault signaling for total reliability, It also features seven DIP switches for manual activation of the enhanced features. This gives the F-FE-TR the ability to be quickly integrated into any network configuration.
 The Thor Fiber F-FE-TR can support a variety of fiber optic cables and connectors that can extend distances (up to 100km) as well as offering flexibility in the migration to 100Base-FX networks. Several converters can be simultaneously installed by using the F-CHA 12-slot 19" rack-mount chassis.

## Main Features

- Device DIP switches allow multiple configuration options
- Automatic MDI/MDI-X selection on RJ-45 port
- Auto-negotiation, NWay support on RJ-45
- Link Fault Signaling (LFS)
- Remote and local loop back test
- LEDs for at-a-glance device status
- Extends distances ranging from 2 km (multi-mode fiber) to 120km (single mode fiber)
- Store-and-forward at full wire speed
- Internal and external power supply options
- FCC Class A \& CE approved.


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## Specification

Standard: IEEE 802.3 (10BASE-T Ethernet); IEEE 802.3u (100BASE-TX/FX Fast Ethernet)
Ports: $1 \times$ copper; $1 \times$ fiber optic
Interfaces: UTP 100/120ohm; RJ-45 type
Fiber optic connector: SC, or ST types (only SC type for single mode)
Max. Distance: UTP: 100 meters (Category 3/4/5 or better) Fiber: 2,000 meters (62.5/125 or 50/125 micron fiber cabling)
20,000~120,000 meters
(9/125 micron fiber cabling)
Unit LED: 100: Green, illuminated when data packets are being transmitted at 100Mbps
LFS: Red, illuminated when a break or disruption exists in copper or fiber links
LNK: Green, illuminated indicates receiving link pulses from compliant device
ACT: Green, flashing to indicate data packets being sent / received
FDX: Amber, flashing to indicate unit is in full-duplex mode
COL: Amber, flashing to indicate collision
PWR: Green, illuminated to indicate unit is operating under normal power

Power:
AC power adapter; 12V DC @ 0.5A

## Environment:

Operating Temperature: $0^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}$
Relative Humidity: $10 \%$ to $80 \%$, Non-condensing
Non-Operating/Storage:
Temperature: $\quad-25^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}$
Relative Humidity: $5 \%$ to $90 \%$,
Non-condensing
Emissions: $\quad$ FCC Part 15 of Class A \& CE approved
Dimensions: $\quad 74 \times 110 \times 24 \mathrm{~mm}(\mathrm{~W} \times \mathrm{D} \times \mathrm{H})$
Weight: $\quad 148 \mathrm{~g}$

Switches:DIP 1-Enables / disables auto-negotiation
DIP 2 - Copper port (RJ45) duplex mode;
full-duplex or half-duplex
DIP 3 - Copper port (RJ45) data bit rate; 10Mbps or 100Mbps
DIP 4 - Fiber port duplex mode; full-duplex or half-duplex
DIP 5-Enables / disables link fault signaling (LFS)
DIP 6 - Enables / disables local loop back (LLBK)
DIP 7 - Enables / disables remote loop back (RLBK)

## Applications

The following illustrates typical applications for the F-FE-TR series. The actual distances will depend on several factors including the quality of cables used and the terminal equipment employed.


## Ordering Information

## F-FE-TR-MM

Enhanced 10/100Base-TX to 100Base-FX Multi-mode up to 2000 feet- Dual Fiber Media Converter (SC Connector)

## Media Converter (SC Connector)

## F-FE-TR-SM-20/30/60/100 (km):

Enhanced 10/100Base-TX to 100Base-FX Single Mode
Dual Single mode fiber Media Converter (SC Connector)

## F-FE-TRS-1310-20/40 (km):

Enhanced 10/100Base-TX to 100Base-FX Single Fiber Single fiber Media Converter, Transmitter (WDM TX1310nm/ RX1550nm)
F-FE-TRS-1550-20/40 (km):
Enhanced 10/100Base-TX to 100Base-FX Single
Fiber Media Converter, Receiver (WDM TX1550nm/ RX1310nm)

