

**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 2km (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.



### Specification

Standard: IEEE 802.3 (10BASE-T Ethernet);  
IEEE 802.3u (100BASE-TX/FX Fast Ethernet)

Ports: 1 x copper; 1 x 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°C to 50°C  
Relative Humidity: 10% to 80%, Non-condensing  
Non-Operating/Storage:  
Temperature: -25°C to 70°C  
Relative Humidity: 5% to 90%,  
Non-condensing

Emissions: FCC Part 15 of Class A & CE approved

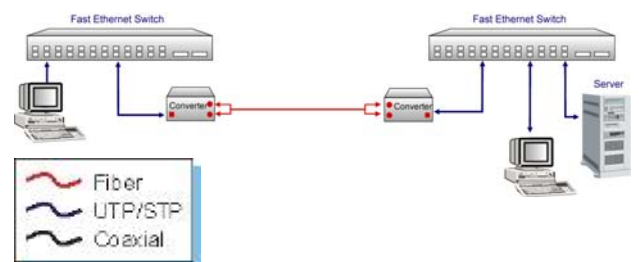
Dimensions: 74 x 110 x 24mm (W x D x H)

Weight: 148g

**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)