

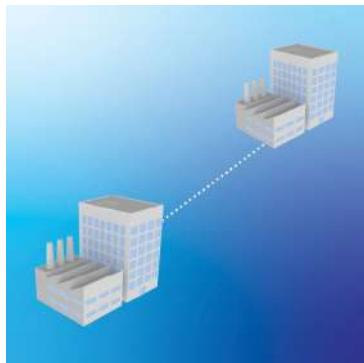


## Hardened Industrial 1000BASE-LX Multi-Mode SC Fiber Converter (1km, 0.62mi.)

TI-FGSC (v1.xR)

- Hardened IP50-rated industrial compact media converter
- 1000BASE-LX (1310nm) multi-mode fiber for distances of up to 1km (0.62 mi)
- 1 x Gigabit RJ45 port and 1 x SC-type interface port
- Operating temperature range of -40° – 75° C (-40° – 167° F)
- 12 – 60V DC power input with overload current protection
- 6kV Ethernet surge protection
- Fanless design for silent operation
- Includes DIN-Rail mount and wall mount brackets
- Power supply sold separately (model: TI-M6024)
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's Hardened Industrial 1000BASE-LX Multi-Mode SC Fiber Converter, model TI-FGSC, features a gigabit RJ45 port and a 1000BASE-LX SC interface port for building-to-building or long-distance fiber optic cable runs of up to 1km (0.62 mi.). The industrial multi-mode media converter's compact IP50-rated design allows for flexible installation, provides ingress dust protection, and includes DIN-rail and wall mounting hardware options. The industrial SC fiber converter's rugged design provides resistance to standard compliance levels of shock and vibration, and operates within an extreme temperature range of -40° – 75° C (-40° – 167° F). The front panel DIP switches quickly allow switching between switch/converter modes, and enable or disable Link Fault Pass Through (LFPT).



### Distance

1000BASE-LX (1310nm) gigabit multi-mode fiber for building-to-building or long-distance fiber optic cable runs of up to 1km (0.62 mi.)



### Front Panel Switches

The industrial multi-mode media converter's front panel DIP switches quickly allow switching between switch converter modes, and enable or disable Link Fault Pass Through (LFPT).



### Hardened Compact Design

Equipped with an IP50-rated housing for dust ingress protection, 6kV Ethernet surge protection, designed to provide resistance to standard compliance levels of shock and vibration, and operates within an extreme temperature range of 40° – 75° C (-40° – 167° F).

## FEATURES



### Network Ports

1 x Gigabit RJ45 Port and 1 SC fiber optic port



### Distance

1000BASE-LX (1310nm) gigabit multi-mode fiber for distances of up to 1km (0.62 mi)



### Extreme Temperature Range

Operates within an extreme operating temperature range of 40° – 75° C (-40° – 167° F)



### Link Fault Pass Through

Easily enable the LFPT (Link Fault Pass Through) feature on the industrial multi-mode media converter using the front panel DIP switch to identify a link fault to the remote LFPT enabled media converter



### Overload Current Protection

12 – 60V DC power input with overload current protection; power supply sold separately (model: TIM6024)



### Surge Protection

Provides up to 6kV RJ45 Ethernet surge protection



### Dust Protected

The industrial multi-mode converter's IP50-rated metal housing provides ingress protection from dust



### Converter Modes

Quickly toggle between switch or converter (passthrough) modes using the front panel DIP switch depending on network traffic requirements and provide installation flexibility



### Shock and Vibration Resistant

Complies with shock (EN 60068-227), freefall (EN 60068-2-31), and vibration (EN 60068-2-6) standards



### Fanless

Fanless design lowers energy consumption and eliminates operating noise



### Electro Magnetic Compliance

Complies with industrial EMS certifications ESD (IEC 61000-4-2): Level 3 Contact: 6kV, Air: 8kV; EFT (IEC 61000-4-4): Power 2kV, Signal: 1kV; Surge (IEC 61000-4-5): Power: 2kV, Signal: 2kV



### DIN-Rail / Wall Mounts

The industrial multi-mode media converter includes DIN-Rail mount and wall mount hardware

## NETWORKING SOLUTION



# SPECIFICATIONS

## Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3x
- IEEE 802.3z

## Device Interface

- 1 x Gigabit RJ45 Auto-MDIX port
- 1 x 1000BASE-LX SC-type multi-mode fiber optic port
- 2 x DIP Switches (1: LFPT, 2: Switch/Converter Mode)
- 3-pin removable terminal block
- LED indicators

## Data Transfer Rate

- Ethernet: 10Mbps (half duplex), 20Mbps (full duplex)
- Fast Ethernet: 100Mbps (half duplex), 200Mbps (full duplex)
- Gigabit: 2Gbps (full duplex)
- Fiber: 2Gbps (full duplex)

## Performance

- Data RAM Buffer: 64KB
- Switching Capacity: 4Gbps
- MAC Address Table: 1K entries
- Jumbo Frame: 16KB
- Forwarding rate: 2.98Mpps (64-byte packet size)

## Fiber

- Media: Multi-mode SC fiber optic connector
- Cable: 50 / 125 µm
- Wavelength: 1310 nm
- Optical Output Power (dBm): -9 ~ -3
- Optical Input Power (dBm): -24 ~ -3
- Power Budget: 15 dBm
- Distance: 1km (0.62 mi.)

## Power

- Input: 12 – 60V DC
- Compatible power supply: TI-M6024 (sold separately)
- Max. consumption: 2.148W

## Terminal Block

- 3-pin terminal block
- Wire range: 1.5mm<sup>2</sup>
- Solid wire (AWG): 16-28
- Stranded Wire (AWG): 16-28
- Torque: 3 lb. – in / 0.2Nm / 0.56Nm
- Wire strip length: 6-7mm

## MTBF

- 5,109,029 hours @ 25° C

## Enclosure

- IP50 metal case
- DIN-Rail mountable
- Wall mountable
- Ground terminal
- 6kV ESD protection
- 6kV RJ45 surge protection

## Operating Temperature

- -40° – 75° C (-40° – 167° F)

## Operating Humidity

- Max. 95% non-condensing

## Dimensions

- 62 x 58 x 27mm (2.4 x 2.3 x 1.1 in.)

## Weight

- 148g (5.2 oz.)

## Certifications

- CE
- FCC
- LVD
- Shock (IEC 60068-2-27)
- Freefall (IEC 60068-2-31)
- Vibration (IEC 60068-2-6)
- IEC 61000-4-2
- IEC 61000-4-4
- IEC 61000-4-5

## Warranty

- 3-year

## Package Contents

- TI-FGSC
- Removable terminal block
- DIN-Rail and wall mount kit

All references to speed are for comparison purposes only. Product specifications, size, and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.