



Fiber Converters

TFC-1000 Series

- [Quick Installation Guide \(1\)](#)
- [Technical Specifications \(4\)](#)

1. Before You Start

Package Contents

- Fiber Converter
- Multi-Language Quick Installation Guide
- Power Adapter

If any of the above contents are missing, please contact your reseller.

Minimum Requirements

- An environment that is fairly cool and dry
- An environment that is free from strong electromagnetic field generators (such as motors), vibration, dust and direct exposure to sunlight
- TFC-1600 chassis (optional) or sturdy, level surface that can support the weight of the Fiber Converter
- Gigabit Ethernet Switch
- Multi-Mode or Single-Mode Fiber cable
- Cat. 5e or Cat. 6 RJ-45 Ethernet Cable

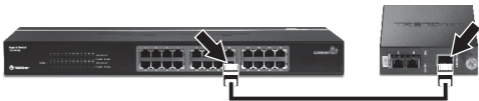
Optional Equipment

- Standard 19" rack
- TFC-1600 chassis
- Mini-GBIC module (e.g. TEG-MGBSX, TEG-MGBS10, TEG-MGBS40, TEG-MGBS80, TEG-MGBS10D35, TEG-MGBS40D35) for Mini-GBIC slot (TFC-1000MGB/TFC-1000MGA only)

2. Hardware Installation

Installing two standalone Fiber Converters

1. Connect an RJ-45 Ethernet cable from the Ethernet port on the fiber converters to an Ethernet port on your switch (e.g TEG-S24Dg).



2. Connect the fiber cable to the fiber converters.



3. Connect the power adapter to the back of the fiber converter.



Note:

1. For the TFC-1000MSC / S20/ S50 / S70, the TX and RX cables must be reversed on the opposite fiber connection.

2. Cabling

- a. Multi-Mode Optic Cable: TFC-1000MSC, TFC-1000MGB/TFC-1000MGA with TEG-MGBSX module
- b. Single-Mode Optic Cable: TFC-1000S20, TFC-1000S50, TFC-1000S70, TFC-1000MGB/TFC-1000MGA with TEG-MGBS10/TEG-MGBS40/TEG-MGBS80 module
- c. Single Strand Optic Cable for TFC-1000S10D3, TFC-1000S10D5, TFC-1000S40D3, TFC-1000S40D5, TFC-1000MGB /TFC-1000MGA with TEG-MGBS10D35/TEG-MGBS40D35 module

Installing Fiber Converter in a Chassis

1. Unscrew the bay cover from the desired bay on the chassis.



2. Unfasten the thumbscrew and remove the fiber converter from the metal casing.



3. Slide the media converter into an available slot and fasten the thumbscrew.



Your installation is now complete.

3. LEDs and DIP switches

LEDs			
LED	Color	Sequence	Function
PWR (Power)	Green	Solid	Device powered On
	Off	n/a	Device powered Off
LINK/ ACT	Green	Solid	2000Mbps (Full Duplex) Connection (per port)
	Green	Blinking	2000Mbps (Full Duplex) Data Transmitting/ Receiving (per port)
	Off	n/a	The link is disconnected

Dip Switches		
Switch	Action	Function
1	On	TX Forced Mode
	Off	TX Auto-Negotiation
2	On	LLR Enable
	Off	LLR Disable

Note:

1. After changing the DIP Switch settings, power cycle the Fiber Converter
2. LLR stands for Link Loss Return. When LLR is enabled, the fiber port's transmitter shuts down if its receiver fails to detect a valid receive link. If one of the optical conductors is bad, the Fiber converter with LLR enabled will return a no link condition to its link partner. LLR is used to detect link problems only on the fiber port. If LLR is enabled on one Fiber converter, the opposite Fiber converter must have LLR disabled

4. Technical Specifications

Power Budget

Model Number	Media	Connectors	Wavelength	Optical Output Power (dBm)		Optical Input Power (dBm)		Power	Distance
				Min.	Max.	Min. (Sensitivity)	Max.	Budget	
TFC-1000MSC	MMF	RJ-45/SC (Duplex)	850nm	-9.5	-4	-12.5	-13.5	7.5	220m (62.5/125µm) cable 550m (50/125 µm) cable
TFC-1000S20	MMF	RJ-45/SC (Duplex)	1310nm	-9.5	-3	-20	-3	11.5	20km
TFC-1000S50	MMF	RJ-45/SC (Duplex)	1550nm	-4	1	-23	-3	19	50km
TFC-1000S70	SMF	RJ-45/SC (Duplex)	1550nm	0	5	-24	-3	24	70km
TFC-1000S10D3	SMF	RJ-45/SC- (Simplex)	TX-1310nm/ RX-1550nm	-9	-3	-21	-3	12	10km
TFC-1000S10D5	SMF	RJ-45/SC- (Simplex)	TX-1550nm/ RX-1310nm	-9	-3	-21	-3	12	10km
TFC-1000S40D3	SMF	RJ-45/SC- (Simplex)	TX-1310nm/ RX-1550nm	-7	-2	-23	-2	16	40km
TFC-1000S40D5	SMF	RJ-45/SC- (Simplex)	TX-1550nm/ RX-1310nm	-7	-2	-23	-2	16	40km

Declaration of Conformity



Company Information:

Company Name:
TRENDnet, Inc.

Company Address:
20675 Manhattan Place
Torrance, CA 90501
USA

Product Information:

Product Description:
1000Base-TX to 1000Base-SX/LX Fiber Converter

Model Number:
TFC-1000MSC, TFC-1000S20, TFC-1000S50, TFC-1000S70
TFC-1000MGB, TFC-1000MGA, TFC-1000S10D3,
TFC-1000S10D5 1000S40D3, TFC-1000S40D5

Brand name:
TRENDnet



Technical Standards:

EN 55022 : 2006 Class A
EN 61000-3-2 : 2006 Class A
EN 61000-3-3 : 1995 + A1 : 2001 + A2 : 2005
EN 55024 : 1998 + A1 : 2001 + A2 : 2003

Declaration:

The product is herewith confirmed to comply with the requirements of Directive 2004/108/EC of the Council (European Parliament) on the EMC directive and Energy-related products Directive 2009/125/EC.

I hereby declare that the products and devices mentioned above are consistent with the standards and provisions of the guidelines.

Sonny Su

Full Name

May 27, 2011

Date

Director of Technology

Position / Title

Signature

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Fiber Converters– 3 Years Limited Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry a 1 year warranty.

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Product Warranty Registration

Please take a moment to register your product online.
Go to TRENDnet's website at <http://www.trendnet.com/register>

Certifications

This equipment has been tested and found to comply with FCC and CE Rules.
Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received. Including interference that may cause undesired operation.



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