

TRENDnet[®]



Quick Installation Guide

TFC-1000 Series (V1.1)

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1. Before You Start

Package Contents

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

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 higher Ethernet Cable

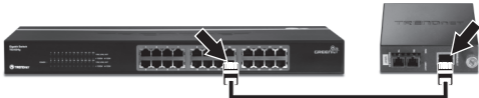
Optional Equipment

- Standard 19" rack
- TFC-1600 chassis
- Mini-GBIC module (e.g. TEG-MGBSX, TEG-MGBS10, TEG-MGBS40, TEG-MGBS80) 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.



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

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	SMF	RJ-45/SC (Duplex)	1310nm	-9.5	-3	-20	-3	11.5	20km
TFC-1000S50	SMF	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

TRENDNET®

Manufacturer's Name and Address

TRENDnet, Inc.
20675 Manhattan Place
Torrance, CA 90501 USA

Zwolsestraat 156 2587 WB
The Hague The Netherlands



Product Information

Model Number: TFC-1000S50 / TFC-1000S70 / TFC-1000S10D3 /
TFC-1000S40D3 / TFC-1000S60D3 / TFC-1000S10D5 /
TFC-1000S40D5 / TFC-1000S60D5 / TFC-1000MSC /
TFC-1000MGA / TFC-1000S20

Product Name: Intelligent 1000Base-T to 1000Base-LX Single-Mode SC Fiber Converter (50km/31miles) /
Intelligent 1000Base-T to 1000Base-LX Single-Mode SC Fiber Converter (70km/43.5 miles) /
Intelligent 1000Base-T to 1000Base-LX Dual Wavelength Single Mode SC Fiber Converter (10km/6.2miles) /
Intelligent 1000Base-T to 1000Base-LX Dual Wavelength Single Mode SC Fiber (40 km / 24.85 miles) /
Intelligent 1000Base-T to 1000Base-LX Dual Wavelength Single Mode SC Fiber (60 km / 37.3 miles) /
Intelligent 1000Base-T to 1000Base-LX Dual Wavelength Single Mode SC Fiber Converter (10km/6.2miles) /
Intelligent 1000Base-T to 1000Base-LX Dual Wavelength Single Mode SC Fiber (40 km / 24.85 miles) /
Intelligent 1000Base-T to 1000Base-LX Dual Wavelength Single Mode SC Fiber (60 km / 37.3 miles) /
Intelligent 1000Base-T to 1000Base-SX Multi-Mode SC Fiber Converter /
100/1000BASE-T to SFP Media Converter /
Intelligent 1000Base-T to 1000Base-LX Single-Mode SC Fiber Converter (20km/12.4miles)

Declaration of Conformity

TRENDnet[®]

Trade Name: TRENDnet

TRENDnet hereby declare that the product is in compliance with the essential requirements and other relevant provisions under our sole responsibility.

Safety EN 62368-1: 2014 + A11:2017

EMC EN 55032:2015+AC:2016 (CISPR32:2015/COR:2016) (Class A)
AS/NZS CISPR32:2015
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 55024:2010+A1:2015

Directives: EMC Directive 2014/30/EU
RoHS 3 Directive 2015/863/EU
RoHS Directive 2011/65/EU
WEEE Directive 2012/19/EU
REACH Regulation (EC) No. 1907/2006
Low Voltage Directive 2014/35/EU
Ecodesign Directive (EC) 2019/1782

This product is herewith confirmed to comply with the Directives.

Person responsible for this declaration.


Place of Issue: Torrance, California, USA

Date: July 13, 2021

Name: Sonny Su

Title: VP of Technology

Signature: _____



Declaration of Conformity

TRENDNET®

Manufacturer's Name and Address

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20675 Manhattan Place
Torrance, CA 90501 USA



Authorized Representative:
Office: +44 (0) 1635 887 399
Unit 4 Rivermead Business Park,
Pipers Way, Thatcham, RG19 4EP England

Product Information

Model Number: TFC-1000S50 / TFC-1000S70 / TFC-1000S10D3 /
TFC-1000S40D3 / TFC-1000S60D3 / TFC-1000S10D5 /
TFC-1000S40D5 / TFC-1000S60D5 / TFC-1000MSC /
TFC-1000MGA / TFC-1000S20

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AS/NZS CISPR32:2015
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 55024:2010+A1:2015

Directives: Electromagnetic Compatibility Regulations 2016
The Restriction of the Use of Certain Hazardous Substances in
Electrical and Electronic Equipment Regulations 2012
The Waste Electrical and Electronic Equipment Regulations 2013
(as amended)
The REACH Enforcement Regulations 2008 (as amended)
Electrical Equipment (Safety) Regulations 2016
The Ecodesign for Energy-Related Products and Energy Information
(Amendment) (EU Exit) Regulations 2019

This product is herewith confirmed to comply with the Directives.

Person responsible for this declaration.

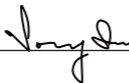
Place of Issue: Torrance, California, USA

Date: July 13, 2021

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Title: VP of Technology

Signature: _____



Certifications

This device complies with Part 15 of the FCC 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.



Waste electrical and electronic products must not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or Retailer for recycling advice.

- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- FCC Caution: Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Technical Support

If you have any questions regarding the product installation, please contact our Technical Support.

Toll free US/Canada: **1-866-845-3673**

Regional phone numbers available at www.trendnet.com/support

TRENDnet

20675 Manhattan Place
Torrance, CA 90501
USA

Applies to PoE Products Only: This product is to be connected only to PoE networks without routing to the outside plant.

Note

The Manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Advertencia

En todos nuestros equipos se mencionan claramente las características del adaptador de alimentación necesario para su funcionamiento. El uso de un adaptador distinto al mencionado puede producir daños físicos y/o daños al equipo conectado. El adaptador de alimentación debe operar con voltaje y frecuencia de la energía eléctrica domiciliaria existente en el país o zona de instalación.

Power supply connected caution

The equipment power supply cord shall be connected to a socket-outlet with earthing connection.

Advertencia

Le cordon d'alimentation de l'appareil doit être raccordé à une prise de courant avec mise à la terre.

If the Optical Transceiver doesn't ship with the unit, the user manual shall have description as below or equivalent: "This product is intended to be use with a UL Listed Optical Transceiver product, Rated DC3.3V, Laser Class I."

Wall-mounted instructions

The Unit has two wall-mount slots on its bottom panel. Before you begin, make sure you have two screws that indicate a diameter measurement of 0.265748 inches (6.75mm).

- (1) Determine where you want to mount the modem.
- (2) Maneuver the modem so the wall-mount slots line up with the two screws.
- (3) Place the wall-mount slots over the screws and slide the modem down until the screws fit snugly into the wall-mount slots.
- (4) Screw type P3.5 x 16mm x 2

Product Warranty Registration

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