



## Fiber Converters

### TFC-1000 Series

- [Guia de Instalação Rápida \(1\)](#)
- [Technical Specifications \(6\)](#)
- [Troubleshooting \(7\)](#)

## 1. Antes de Iniciar

### Conteúdo da Embalagem

- Conversor de fibra
- Guia de Instalação Rápida Multilínguas
- Adaptador de Tensão

Se qualquer um dos conteúdos acima estiver faltando, favor contatar o seu revendedor.

### Requisitos Mínimos

- Um ambiente fresco e seco
- Um ambiente livre de geradores de campo magnético forte (como motores), vibração, poeira e exposição direta ao sol.
- Chassis TFC-1600 (opcional) ou superfície nivelada e que suporte o peso do conversor de fibra.
- Switch Ethernet Gigabit 1000 Mbps
- Cabos de fibra multi-modo ou mono-modo.
- Cabo Ethernet RJ-45 Cat. 5e/6

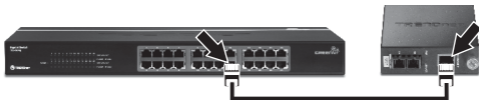
### Equipamento opcional

- Rack padrão EIA 19"
- Chassis TFC-1600
- Módulo mini-GBIC (expl. TEG-MGBSX, TEG-MGBS10, TEG-MGBS40, TEG-MGBS80, TEG-MGBS10D35, TEG-MGBS40D35) para slots Mini-GBIC (apenas TFC-1000MGB/TFC-1000MGA)

## 2. Instalação do Hardware

### Instalando dois conversores de fibra stand-alone

2. Conecte um cabo RJ-45 da porta Ethernet do conversor de fibra a uma porta Ethernet de seu switch (expl. TEG-S24Dg).



2. Conecte o cabo de fibra aos conversores de fibra.



3. Conecte o adaptador de tensão na parte de trás do conversor de fibra.



### **Nota:**

1. Para TFC-1000MSC / S20/ S50 / S70, os cabos TX e RX têm de ser invertidos na conexão de fibra oposta.
2. Cabeamento
  - a. Cabo Ótico Multi-modo: TFC-1000MSC, TFC-1000MGB/TFC-1000MGA com módulo TEG-MGBSX
  - b. Cabo Ótico Mono-modo: TFC-1000S20, TFC-1000S50, TFC-1000S70, TFC-1000MGB/TFC-1000MGA com módulo TEG-MGBS10/TEG-MGBS40/TEG-MGBS80
  - c. Cabo Ótico Singelo: TFC-1000S10D3, TFC-1000S10D5, TFC-1000S40D3, TFC-1000S40D5, TFC-1000MGB/TFC-1000MGA com módulo TEG-MGBS10D3/TEG-MGBS10D5/TEG-MGBS40D3/TEG-MGBS40D5

## Instalando Conversor de Fibra no Chassis

1. Desaparafuse a tampa do slot da baía desejada do chassis.



2. Desaparafuse a carcaça de metal e remova o conversor de fibra.



3. Instale o conversor de fibra na baía desejada e reaperte o parafuso.



Sua instalação agora está completa.

### 3. LEDs e Chaves Dip Switch

LEDs			
LED	Cor	Sequência	Função
PWR (Power)	Verde	Estável	Dispositivo alimentado
	Desligado	Desligado	Dispositivo desligado
LINK/ ACT	Verde	Estável	Conexão 2000 Mbps (Full Duplex)
	Verde	Blinking	Transmissão/Recepção de Dados em 2000Mbps (Full Duplex)
	Desligado	Desligado	El enlace está desconectado

Conmutadores DIP		
Conmutador	Acción	Função
1	Encendido	Modo TX Forçado
	Desligado	Autonegociação TX
2	Encendido	LLR Habilitado
	Desligado	LLR Desativar

#### Nota:

1. Após mudar as configurações da chave dip switch, desligue e religue o conversor de fibra.
2. LLR significa Link Loss Return. Quando LLR está ativado, o transmissor da porta de fibra desliga se seu receptor não consegue detectar o recebimento de um link válido. Se um dos condutores ópticos estiver ruim, o cartão com LLR habilitado retornará uma condição de nenhum link para o seu parceiro de link. LLR é utilizado para detectar problemas de ligação apenas na porta de fibra. Se LLR estiver habilitado em um conversor de fibra, o LLR do conversor de fibra oposto tem de estar desabilitado.

## 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	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

### **1. Após conectar o conversor de fibra, os LEDs não acenderam. O que devo fazer?**

1. Certifique-se de que a tomada elétrica está energizada.
2. Certifique-se de que o adaptador de tensão está adequadamente conectado ao conversor e à tomada.
3. Certifique-se de que os cabos Ethernet e de Fibra estão conectados.

### **2. Todos os LEDs estão acesos, mas eu não consigo conexão. O que devo fazer?**

1. Certifique-se de estar utilizando o cabo apropriado (isto é, cabo de fibra multi-modo para conversor multi-modo, cabo de fibra mono-modo para conversores mono-modo).
2. Certifique-se de que os cabos TX e RX estão invertidos na conexão de fibra oposta (TFC-1000MSC, TFC-1000S20, TFC-1000S50, TFC-1000S70).
3. Desligue os conversores de fibra e os switches. Aguarde 15 segundos e então religue os switches e os conversores.

### **3. Qual a distância máxima suportada pelo conversor de fibra?**

Favor recorrer à seção 4 para informações sobre alcances.

Se você ainda encontrar problemas ou tiver alguma pergunta referente ao **TFC-1000**, favor entrar em contato com o Departamento de Suporte Técnico da TRENDnet.

# 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.

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

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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.



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



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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 domiciliar existente en el país o zona de instalación.

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