# TRENDNET®

# Fiber Converters
TFC-1000 Series

• Руководство по быстрой установк (1)

## 1. Что нужно сделать в самом начале

### Содержимое упаковки

- Волоконый преобразователь
- Руководство по быстрой установке на нескольких языках
- Блок питания

Если любой из выше содержание отсутствует, пожалуйста, обратитесь к поставщику.

### Минимальные требования

- Достаточно прохладное и сухое место
- Место, в котором отсутствуют источники электромагнитных полей (напр., двигатели), вибрация, пыль, и куда не проникает прямой солнечный свет
- Шасси TFC-1600 (дополнительно) или устойчивая, ровная поверхность, выдерживающая вес волоконного преобразователя.
- Коммутатор Gigabit Ethernet 1000 Мбит/с
- Волоконные кабели – многомодовые или одномодовые
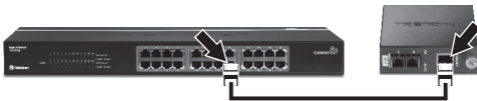- Сетевой кабель RJ-45 Ethernet категории 5e или 6

### Опционное Оборудование

- 19" стойка стандарта
- Шасси TFC-1600
- Модуль Mini-GBIC (напр., EG-MGBSX, TEG-MGBS10, TEG-MGBS40, TEG-MGBS80, TEG-MGBS10D35, TEG-MGBS40D35) для гнезд Mini-GBIC (только TFC-1000MGB/TFC-1000MGA)

## 2. Установка оборудования

**Установка 2 отдельных преобразователей**

**1.** Подключите кабель RJ-45 Ethernet от порта Ethernet на преобразователе к порту Ethernet на коммутаторе (напр., TEG-S24Dg).

**2.** Присоедините волоконный кабель к преобразователю.



**3.** Присоедините силовой адаптер к задней панели преобразователя.



#### Примечание:

1. Для устройства TFC-1000MSC / S20/ S50 / S70 кабели TX и RX на разных концах соединения подключены в обратном порядке.

2. Кабели

    a. Многомодовый оптический кабель: TFC-1000MSC, Устройство TFC-1000MGB/TFC-1000MGA с модулем TEG-MGBSX

    b. Одномодовый оптический кабель: TFC-1000S20, TFC-1000S50, TFC-1000S70, Устройство TFC-1000MGB с модулем TEG-MGBS10/ TEG-MGBS40/TEG-MGBS80

    c. Одножильный оптический кабель: TFC-1000S10D3, TFC-1000S10D5, TFC-1000S40D3, TFC-1000S40D5, Устройство TFC-1000MGB/ TFC-1000MGA с модулем TEG-MGBS10D35/TEG-MGBS40D35

## Установка преобразователя в шасси

**1.** Отверните винты на крышке нужного отсека шасси.



**2.** Отверните винт с накатной головкой и снимите волоконный преобразователь с металлического корпуса



**3.** Задвиньте преобразователь носителей в имеющееся гнездо и заверните винт с накатной головкой



Установка завершена.

## 3. Световые индикаторы и DIP-переключатели

### Световые индикаторы

| Световые индикаторы | Цвет | Последовательность | Функция |
|---|---|---|---|
| **PWR (Питание)** | Зеленый | Горит постоянн о | Питание включено |
| | Выключено | | Питание выключено |
| **LINK/ACT** | Зеленый | Горит постоя нно | 2000 Мбит/с (дуплексный режим) |
| | Зеленый | Мигание | 2000Мбит/с (дуплексный режим) Хорошее качество соединения |
| | Выключено | | Линия связи отключена |

### DIP-переключатели (двухпозиционные переключатели)

| Переключатель | Действие | Функция |
|---|---|---|
| **1** | **Вкл** | TX Forced Mode (Вынужденный режим) |
| | **Выключено** | TX Auto-Negotiation (Автосогласование) |
| **2** | **Вкл** | LLR Enable (Включить) |
| | **Выключено** | LLR Disable (Отключить) |

#### Примечание:

1. После изменения настроек DIP-переключателя, выключите и включите волоконно-оптический преобразователь.

2. Аббревиатура LLR обозначает Link Loss Return (Возврат потери соединения). Когда функция LLR включена, передатчик волоконно-оптического порта отключается в том случае, если его приемник не может выявить действующую принимающую линию связи. Если один из оптических проводников вышел из строя, карта со включенной функцией LLR возвращает сигнал об отсутствии линии связи своей паре. Функция LLR используется только для выявления проблем соединения с волоконно-

**4**

# 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 |

# Declaration of Conformity

**TRENDNET**

## 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

CE

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 | Director of Technology |
| Full Name | Position / Title |
| May 27, 2011 | |
| Date | Signature |

## Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

### 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.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

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# TRENDNET

## 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.

FC CE PC

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