



## Quick Installation Guide



**1000Base-SX/LX  
Fiber Converters**

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# 1. Что нужно сделать в самом начале





## Содержимое упаковки

- Волоконный преобразователь
- Руководство по быстрой установке
- Блок питания (7,5 пост. т., 1,5А)

## Минимальные требования

- 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 Ethernet 10/100 Мбит/с
- Волоконные кабели – многомодовые или одномодовые
- Кабель CAT-5 или CAT-6 RJ-45 Ethernet

## Описание изделия

Model Name	Multi/Single-Mode	Fiber Connector
TFC-1000MSC	Multi-Mode	SC (Duplex) 
TFC-1000S20	Single-Mode	
TFC-1000S50		
TFC-1000S70		
TFC-1000S10D3	Single-Mode Bidirectional	SC (Simplex) 
TFC-1000S10D5		

## 2. Установка оборудования

### Установка 2 отдельных преобразователей

1. Присоедините волоконный кабель к преобразователю. Данный кабель должен быть многомодовым, для the TFC-110MM/MST/MSC. Данный кабель должен быть одномодовым, TFC-1000S20/S50/S70/S10D3/S10D5.

2. Подключите кабель RJ-45 Ethernet от порта Ethernet на преобразователе к порту Ethernet на коммутаторе (напр., TEG-S160TX или TEG-S240TX).

3. Присоедините силовой адаптер к задней панели преобразователя.

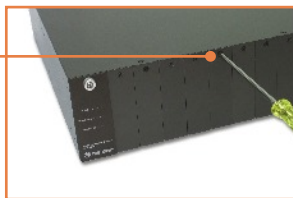


Примечание: кабели TX и RX нужно переставить на противоположном волоконном соединении.

Примечание: Устройство TFC-1000S10D3 должно быть спарено с устройством TFC-1000S10D5.

## Установка преобразователь носителей в шасси

4. Отверните винты на крышке нужного отсека шасси.



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



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



**Установка завершена.**

# Specifications

<b>Applicable Standards:</b>	IEEE802.3ab 1000BASE-TX IEEE802.3z 1000BASE-SX/LX
<b>Fixed Ports:</b>	1 TX port, 1 FX port
<b>Forwarding rate:</b>	1488000pps for 1000Mbps
<b>LED Indicators:</b>	PWR, LNK/ACT
<b>DIP Switches:</b>	Switch 1: On(Forced Mode); Off(Auto-Negotiation) Switch 2: On(LLR enabled); Off(LLR disabled)
<b>Cable :</b>	<u>1000BASE-T</u> Cat. 5e or Cat. 6 EIA/TIA-568 100-ohm screened twisted-pair (STP)  <u>1000BASE-SX</u> 62.5/125µm multi-mode fiber optic cable 50/125µm multi-mode fiber optic cable  <u>1000BASE-LX</u> 9/125µm single-mode fiber optic cable 10/125 µm single-mode fiber optic cable
<b>Dimensions:</b>	L120 × W88 × H25 mm
<b>Weight:</b>	305 g
<b>Power:</b>	External power adaptor 7.5V 1.5A
<b>Power Consumption:</b>	5.5 Watts Max.
<b>Temperature:</b>	Operating: 0°C ~ 40°C (32°F ~ 104°F) Storage: -25°C ~ 70°C (-13°F ~ 158°F)
<b>Humidity:</b>	10 ~ 90%, non-condensing
<b>Certifications:</b>	FCC part 15 Class B, CISPR ClassB, VCCI Class B, CE Mark

# Ordering Information

Media Converters							
Model Number	Port 1			Port 2			
	Speed (Mbps)	Cable/Connector	Max. Distance	Speed (Mbps)	Wavelength	Cable/(125 $\mu$ m) /Connector	Max. Distance
TFC-1000MSC	1000	Cat. 3, 4, 5, EIA/TIA-568 100-ohm STP	100M	1000	1300nm	MMF (50 $\mu$ m or 62.5 $\mu$ m) MT-RJ	220M 62.5/125 $\mu$ m 550M 50/125 $\mu$ m
TFC-1000S20	1000	Cat. 3, 4, 5, EIA/TIA-568 100-ohm STP	100M	1000	1300nm	MMF (50 $\mu$ m or 62.5 $\mu$ m) SC	20 km
TFC-1000S50	1000	Cat. 3, 4, 5, EIA/TIA-568 100-ohm STP	100M	1000	1300nm	MMF (50 $\mu$ m or 62.5 $\mu$ m) ST	50 km
TFC-1000S70	1000	Cat. 3, 4, 5, EIA/TIA-568 100-ohm STP	100M	1000	1300nm	SMF (9 $\mu$ m or 10 $\mu$ m) SC	70 km
TFC-1000S10D3	1000	Cat. 3, 4, 5, EIA/TIA-568 100-ohm STP	100M	1000	TX: 1310nm RX: 1550nm	Bi-directional SMF (9 $\mu$ m or 10 $\mu$ m) SC	20 km
TFC-1000S10D5	1000	Cat. 3, 4, 5, EIA/TIA-568 100-ohm STP	100M	1000	TX: 1310nm RX: 1550nm	Bi-directional SMF (9 $\mu$ m or 10 $\mu$ m) SC	20 km

Note: MMF (multi-mode fiber); SMF (single-mode fiber)

**Q1: After connecting the Fiber converter, the LEDs do not turn on. What should I do?**

**A1:** First, check that the power outlet is receiving power. Second, make sure the power adapter is firmly connected to the Fiber converter and the power outlet. Third, make sure the Ethernet and the Fiber cables are connected.

**Q2: All the LEDs are on, but I can't make a connection. What should I do?**

**A2:** First, verify that you are using the proper fiber cable (e.g. multi-mode fiber cable for multi-mode converter; single-mode fiber cables for single-mode converters). Second, verify that the TX and RX cables have been reverse on the opposite Fiber connection. Third, power down the fiber converters and the switches. Wait 15 seconds, then plug the switches and the fiber converters back in.

**Q3: What is the maximum distance that is supported by the fiber converter?**

**A3:** Please reference section 4 for distance information.

If you still encounter problems or have any questions regarding the Fiber Converters please contact TRENDnet's Technical Support Department.



## 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 - 5 Year Warranty

If a product does not operate as warranted above during the applicable warranty period, TRENDnet shall, at its option and expense, repair the defective product or deliver to customer an equivalent product to replace the defective item. All products that are replaced will become the property of TRENDnet. Replacement products may be new or reconditioned.

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.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product through any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDnet office within the applicable warranty period for a Return Material Authorization (RMA) number, accompanied by a copy of the dated proof of the purchase. Products returned to TRENDnet must be pre-authorized by TRENDnet with RMA number marked on the outside of the package, and sent prepaid, insured and packaged appropriately for safe shipment.

WARRANTIES EXCLUSIVE: IF THE TRENDNET PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE, AT TRENDNET'S OPTION, REPAIR OR REPLACEMENT. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TRENDNET NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE OR USE OF TRENDNET'S PRODUCTS.

TRENDNET SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLIGENCE, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO REPAIR OR MODIFY, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OR OTHER HAZARD.

LIMITATION OF LIABILITY: TO THE FULL EXTENT ALLOWED BY LAW TRENDNET ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT TRENDNET'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Governing Law: This Limited Warranty shall be governed by the laws of the state of California.

Note: AC/DC Power Adapter, Cooling Fan, Cables and Power Supply carry 1-Year Warranty

## 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.



**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 domiciliar existente en el país o zona de instalación.



## TRENDnet Technical Support

### US • Canada

**Toll Free Telephone:** 1(866) 845-3673

24/7 Tech Support



### Europe (Germany • France • Italy • Spain • Switzerland • UK)

**Toll Free Telephone:** +00800 60 76 76 67

English/Espanol - 24/7

Francais/Deutsch - 11 am-8pm, Monday - Friday MET

### Worldwide

**Telephone:** +(31) (0) 20 504 05 35

English/Espanol - 24/7

Francais/Deutsch - 11 am-8pm, Monday - Friday MET

## Product Warranty Registration

Please take a moment to register your product online.

Go to TRENDnet's website at <http://www.trendnet.com>

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