



Fiber Converters

TFC-110 Series

- Руководство по быстрой установк (1)

1. Что нужно сделать в самом начале

Содержимое упаковки

- Волоконный 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 Ethernet 10/100 Мбит/с
- Волоконные кабели – многомодовые или одномодовые
- Сетевой кабель RJ-45 Ethernet категории 5, 5е или 6

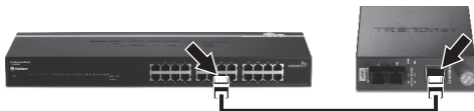
Опциональное Оборудование

- 19" стойка стандарта
- Шасси TFC-1600

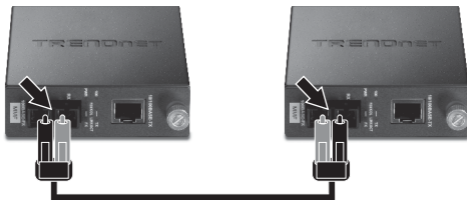
2. Порядок установки

Установка 2 отдельных преобразователей

1. Подключите кабель RJ-45 Ethernet от порта Ethernet на преобразователе к порту Ethernet на коммутаторе (напр., TE100-S24g).



2. Присоедините волоконный кабель к преобразователю.



3. Присоедините силовой адаптер к задней панели преобразователя.



Примечание:

1. Для устройства TFC-110MM/MST/MSC/110S15/S15i/S30/S30i/S60/S60i/S10 кабели TX и RX на разных концах соединения подключены в обратном порядке.
2. Устройство TFC-15MS100 преобразует многомодовый волоконный носитель в одномодовый, оно может подключаться к коммутатору с многомодовым волоконным соединением типа SC (напр., TEG-424WS с волоконными модулями) для увеличения расстояния до 15 км при одномодовом волоконном кабеле.
3. Кабели:
 - a. Многомодовый оптический кабель: TFC-110MSC, TFC-110MST, TFC-110MM
 - b. Одномодовый оптический кабель: TFC-110S15, TFC-110S30, TFC-110S60, TFC-110S100, TFC-110S15i, TFC-110S30i, TFC-110S60i
 - c. Одножильный оптический кабель для TFC-110S20D3, TFC-110S20D5, TFC-110S40D3, TFC-110S40D5

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. LEDs and DIP switches

LEDs					
LED	Color	Sequence	Function		
			TFC-110MM/ MST/MSC/ 110S15/S30/ S60/S100/ 20D3/20D5/ 40D3/40D5	TFC-110S15i/ 30i/60i	TFC-15MS100
PWR (Power)	Green	Solid	Device powered On		
	Off	n/a	Device powered Off		
100M	Green	Solid	100/200Mbps (Half/Full Duplex) Connection	n/a	
	Off	n/a	10/20Mbps (Half/Full Duplex) Connection	n/a	
FDX/ COL (TX)	Green	Solid	Connection on TX end in full duplex mode	n/a	
	Green	Blinking	Data collision is detected	n/a	
	Off	n/a	Connection on TX end in half duplex mode	n/a	
FDX/ COL (FX)	Green	Solid	Connection on Fiber end in full duplex mode	n/a	
	Green	Blinking	Data collision is detected	n/a	
	Off	n/a	Connection on Fiber end in half duplex mode	n/a	
LINK/ ACT (TX)	Green	Solid	100/200Mbps (Half/Full Duplex) or 10/20Mbps (Half/ Full Duplex) Connection	n/a	
	Green	Blinking	100/200Mbps (Half/Full Duplex) or 10/20Mbps Data Transmitting/Receiving	n/a	
	Off	n/a	The link is disconnected	n/a	

LEDs (continued)

LED	Color	Sequence	Function		
			TFC-110MM/ MST/MSC/ 110S15/S30/ S60/S100/ 20D3/20D5/ 40D3/40D5	TFC-110S15i/ 30i/60i	TFC-15MS100
LINK/ ACT (FX)	Action	Solid	100/200Mbps (Half/Full Duplex) Connection		n/a
	Green	Blinking	100/200Mbps (Half/Full Duplex) Data Transmitting/ Receiving		n/a
	Off	n/a	The link is disconnected		n/a
LINK/ ACT	Green	Solid	n/a		100/200Mbps (Half/Full Duplex) Connection
	Green	Blinking	n/a		100/200Mbps (Half/Full Duplex) Data Transmitting/ Receiving
	Off	n/a	n/a		The link is disconnected
FAIL (TX)	Green	Solid	n/a	The TX link is disconnected	n/a
	Off	n/a	n/a	The TX link is connected	n/a
FAIL (FX)	Red	Solid	n/a	The Fiber link is disconnected	n/a
	Off	n/a	n/a	The Fiber link is connected	n/a

DIP Switches			
Switch	Action	Function	
		TFC-110MM/MST/MSC/ 110S15/S30/S60/S100/ 20D3/20D5/40D3/40D5	TFC-110S15i/30i/60i
1	On	FX Half-Duplex	FX Half-Duplex
	Off	FX Full-Duplex	FX Full-Duplex
2	On	n/a	TX Forced Mode
	Off	n/a	TX Auto-Negotiation
3	On	n/a	TX 10M
	Off	n/a	TX 100M
4	On	n/a	TX Half-Duplex
	Off	n/a	TX Full Duplex
5	On	n/a	LLR Enable
	Off	n/a	LLR Disable
6	On	n/a	LLCF Enable
	Off	n/a	LLCF Disable

Note:

1. After changing the DIP Switch settings, power cycle the Fiber Converter.
2. LLCF stands for Link Loss Carry Forward. When LLCF is enabled, the ports do not transmit a link signal until they receive a link signal from the opposite port. Link loss is "carried forward" to the managed switch or hub that is sending the link. LLCF can be used for either the copper or fiber ports.
3. 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 card 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 Budget	Distance
				Min.	Max.	Min. (Sensitivity)	Max.		
TFC-110MSC	MMF	RJ-45/SC (Duplex)	1310nm	-23.5	-14	-32	-14	13	2 km
TFC-110MST	MMF	RJ-45/ST (Duplex)	1310nm	-23.5	-14	-32	-8	8.5	2 km
TFC-110MM	MMF	RJ-45/MT-RJ (Duplex)	1300nm	-23.5	14	-31	-14 (typical)	7.5	2 km
TFC-110S15	SMF	RJ-45/SC (Duplex)	1310nm	-20	0	-32	0	12	15 km
TFC-110S30	SMF	RJ-45/SC (Duplex)	1310nm	-15	-8	-34	0	19	30 km
TFC-110S60	SMF	RJ-45/SC (Duplex)	1310nm	-5	0	-35	0	30	60 km
TFC-110S100	SMF	RJ-45/SC (Duplex)	1550nm	-5	0	-35	0	30	100 km
TFC-110S15i	SMF	RJ-45/SC (Duplex)	1310nm	-20	0	-32	0	12	15 km
TFC-110S30i	SMF	RJ-45/SC (Duplex)	1310nm	-15	-8	-34	0	19	30 km
TFC-110S60i	SMF	RJ-45/SC (Duplex)	1310nm	-5	0	-35	0	30	60 km
TFC-110S20D3	SMF	RJ-45/SC- (Simplex)	TX-1310nm/ RX-1550nm	-14	-8	-31	0	17	20 km
TFC-110S20D5	SMF	RJ-45/SC- (Simplex)	TX-1550nm/ RX-1310nm	-14	-8	-31	0	17	20 km
TFC-110S40D3	SMF	RJ-45/SC- (Simplex)	TX-1310nm/ RX-1550nm	-8	-3	-34	-3	26	40 km
TFC-110S40D5	SMF	RJ-45/SC- (Simplex)	TX-1550nm/ RX-1310nm	-8	-3	-34	-3	26	40 km

Troubleshooting

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

1. Check that the power outlet is receiving power.
2. Make sure the power adapter is firmly connected to the Fiber converter and the power outlet.
3. Make sure the Ethernet and the Fiber cables are connected.

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

1. 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).
2. Verify that the TX and RX cables have been reverse on the opposite Fiber connection (TFC-110MM, TFC-110MSC, TFC-110MST, TFC-110S15, TFC-110S30, TFC-110S60, TFC-110S100, TFC-110S15i, TFC-110S30i, TFC-110S60i).
3. Power down the fiber converters and the switches. Wait 15 seconds, then plug the switches and the fiber converters back in.

3. What is the maximum distance that is supported by the fiber converter?

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.

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

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

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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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This Class-A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe-A est conforme à la norme NMB-003 du Canada.

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