



Fiber Converters

TFC-110 Series

- Guía de instalación rápida (1)

1. Antes de iniciar

Contenidos del paquete

- Convertidor de Fibra
- Guía de instalación rápida multilingüe
- Alimentación eléctrica de CA

Si cualquiera de los contenidos anteriores se encuentra, por favor contacte a su distribuidor.

Requisitos mínimos

- Un entorno bastante fresco y seco
- Un ambiente donde no haya generadores de campos electromagnéticos fuertes (como motores), vibraciones, polvo o exposición directa a la luz solar
- Un chasis TFC-1600 (opcional) o una superficie firme y nivelada capaz de sostener el peso del Convertidor de fibra
- Conmutador Ethernet a 10/100Mbps
- Cables de fibra para conexiones multimodo o de modo sencillo.
- Cable Cat.5, 5e o 6 RJ-45 para ethernet

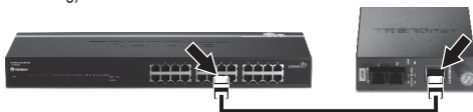
Equipo Opcional

- Rack estándar de 19"
- Chasis TFC-1600

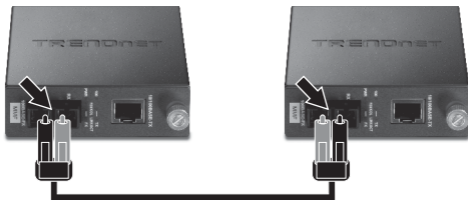
2. Instalación del Hardware

Instalación de 2 convertidores de fibra de forma independiente

1. Conecte un cable de ethernet RJ-45 desde el puerto ethernet de los convertidores de fibra hasta un puerto ethernet del conmutador (como el E TE100-S24g).



2. Conecte el cable de fibra a los convertidores.



3. Conecte el adaptador de corriente a la parte posterior del convertidor.



Nota:

1. Para el TFC-110MM/MST/MSC/110S15/S15i/S30/S30i/S60/S60i/S10, los cables TX y RX se deben colocar al revés en la conexión de fibra contraria.
2. El TFC-15MS100 convierte de fibra multimodo a fibra de modo sencillo, puede conectarse a un conmutador dotado de conectores de fibra tipo SC multimodo (como el TEG-424WS con módulos de fibra) para extender la distancia hasta 15 kilómetros con fibra en modo sencillo.
3. Cableado:
 - a. Cable de fibra óptica multimodo: TFC-110MSC, TFC-110MST, TFC-110MM.
 - b. Cable de fibra óptica monomodo: TFC-110S15, TFC-110S30, TFC-110S60, TFC-110S100, TFC-110S15i, TFC-110S30i, TFC-110S60i.
 - c. Cable de fibra óptica trenzado: TFC-110S20D3, TFC-110S20D5, TFC-110S40D3, TFC-110S40D5.

Instalación del convertidor de fibra sobre un chasis

1. Destornille la tapa del compartimiento deseado del chasis.



2. Afloje el tornillo de ajuste manual y saque el convertidor de la caja de metal.



3. Inserte el convertidor de fibra en una ranura disponible y apriete el tornillo de ajuste manual.



La instalación ha sido completada.

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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- (2) This device must accept any interference received. Including interference that may cause undesired operation.



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Cet appareil numérique de la classe-A est conforme à la norme NMB-003 du Canada.

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