

# Fiber Converters TFC-110 Series

• Guide d'installation rapide (1)

# 1. Avant de commencer

# Contenu de l'emballage

- Convertisseur fibre
- · Guide d'installation rapide en plusieurs langues
- Alimentation

Si tout le contenu ci-dessus sont manquantes, s'il vous plaît contactez votre revendeur.

# Configuration minimale

- . Un environnement assez frais et sec
- Un environnement exempt de toute source de génération de champ électromagnétique fort (comme les moteurs), de vibration, de poussières et veillez à ce qu'il ne soit pas directement exposé aux rayons du soleil
- Châssis TFC-1600 (non fourni) ou une surface plane pouvant supporter le poids de du convertisseur fibre
- Switch Ethernet 10/100Mbps
- · Câbles fibres multi-mode ou monomode
- Câble Ethernet RJ-45 Cat.5, 5e ou 6

# Équipement optionnel

- Un rack standard 19 pouces
- Châssis TFC-1600

## 2. Installation du matériel

#### Installation de 2 convertisseurs fibre autonomes

 Branchez un câble Ethernet RJ-45 ente le port Ethernet des convertisseurs de fibre et le port Ethernet de votre switch (TE100-S24g).



2. Branchez le câble fibre aux convertisseurs fibre.



3. Branchez l'adaptateur secteur à l'arrière du convertisseur fibre.



### Remarque:

- Pour leTFC-110MM/MST/MSC/110S15/S15i/S30/S30i/S60/S60i/S10, les câbles TX et RX doivent être inversés sur la connexion fibre opposée.
- Le TFC-15MS100 transforme la fibre multi-mode en fibre monomode, il peut être branché à un switch à l'aide d'une connexion fibre de type SC multimode (p. ex. TEG-424WS avec modules fibres) afin d'allonger la distance de la fibre monomode jusque 15km.
- 3. Câblage
  - a. Câble optique multimode: TFC-110MSC, TFC-110MST, TFC-110MM.
  - b. Câble optique monomode: TFC-110S15, TFC-110S30, TFC-110S60, TFC-110S100, TFC-110S15i, TFC-110S30i, TFC-110S60i.
  - c. Câble optique à simple brin por: TFC-110S20D3, TFC-110S20D5, TFC-110S40D3, TFC-110S40D5.

# Installation d'un convertisseur fibre dans un châssis

1. Dévissez le cache baie de la baie choisie sur le châssis.



Desserrez la vis à molette et enlevez le convertisseur fibre du logement métallique.



Glissez le convertisseur fiber dans un logement disponible et serrez la vis à molette.



L'installation est maintenant complète.

# 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	Green	Solid	Device powered On			
(Power)	Off	n/a	Device powere	d Off		
100M	Green	Solid	100/200Mbps ( Duplex) Conne	n/a		
	Off	n/a	10/20Mbps (Ha Duplex) Conne	n/a		
FDX/ COL	Green	Solid	Connection on duplex mode	n/a		
(TX)	Green	Blinking	Data collision i	n/a		
	Off	n/a	Connection on duplex mode	n/a		
FDX/ COL	Green	Solid	Connection on full duplex mod	n/a		
(FX)	Green	Blinking	Data collision i	n/a		
	Off	n/a	Connection on half duplex mo	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 ( Duplex) or 10/2 Transmitting/R	n/a		
	Off n/a The link is disconnect				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	Action	Solid	100/200Mbps ( Duplex) Conne	n/a		
(FX)	Green	Blinking	100/200Mbps ( Duplex) Data T Receiving	n/a		
	Off	n/a	The link is disc	The link is disconnected		
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 Off	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	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	Distance
				Min.	Max.	Min. (Sensitivity)	Max.	Budget	
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

- After connecting the Fiber converter, the LEDs do not turn on. What should I do?
  - Check that the power outlet is receiving power.
  - 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?

- 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).
- 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).
- 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.

## Déclaration de conformité



#### Coordonnées du fournisseur:

Nom:

TRENDnet, Inc.

Adresse:

20675 Manhattan Place

Torrance, CA 90501

USA

#### Détails du produit:

Nom du produit:

100Base-TX to 100Base-FX Fiber Converter

Modèle:

TFC-110MSC, TFC-110MST, TFC-110MM, TFC-110S15, TFC-110S30, TFC-110S60, TFC-110S100, TFC-110S30i, TFC-110S60i, TFC-110S20D3, TFC-110S20D5. TFC-110S40D3. TFC-110S40D5. TFC-15MS100

Nom Commercial:

TRENDnet

## Détails standard applicable:

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

Conn., C.,

#### Déclaration:

Le produit est conforme aux exigences de la directive 2004/108/EC du Conseil (Parlement européen) sur la directive EMC et de produits liés à l'énergie de la directive 2009/125/CE.

Director of Technology

Je declare par la présente que les produits et appareils mentionnés ci-dessus sont conformes aux standards et aux dispositions des directives.

Full Name	Position / Title
May 27, 2011	a 1,
Date	Signature

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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.





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