

SFC2000 User's Manual

1. INTRODUCTION

Fiber Optic Media Converter are multi-speed network devices combining Ethernet and Fast Ethernet in a single compact type are rack-mountable cabinet.

It is used for the high speed, stable, long distance and wide bandwidth data transportation between the fiber optic cable device and the UTP/STP cable device or the network.

This fiber optic media converter have RJ-45 and fiber connector(ST or SC) for the connection of the 10/100/1000Base-TX and 1000Base-FX network. It supports the full Duplex mode and Half Duplex mode, together. The Multi mode fiber optic can reach to the 550m and the single mode fiber optic can reach to the 20, 40, 60, 80, 100km.

1.1 Products

Multimode : 10/100/1000Base-TX to 1000Base-FX, Multimode Fiber 2Core
SFC2000-TS(SC connector, 550m)

Singlmode: 10/100/1000Base-TX to 1000Base-FX, Singlmode Fiber 2Core
SFC2000-TL10(SC connector, 10km)
SFC2000-TL80(SC connector, 80km)

WDM : 10/100/1000Base-TX to 1000Base-FX, Singlmode Fiber 1Core
SFC2000-TWL/A10, SFC2000-TWL/B10(SC connector, 10km)

SFP : 10/100/1000Base-TX to Mini-GBIC
SFC2000-SFP(TX 1Port, SFP 1Port)

1.2 Checklist

Fiber Optic Converter 1EA
AC-DC Power Adapter 1EA
(Internal Power Type - Power Cable)
User's Manual 1EA

1.3 Characteristics

- It has been designed in accordance with IEEE802.3u and IEEE802.3 Standard
- AutoNegotiation Mode & Manual Mode
- Full Duplex and Half Duplex support
- LEDs for ther easily monitoring with : Power, Act, Link, FDX
- SMPS Power Supply
- WDM - Single Mode 1 Fiber
- LLCF(Link Loss Carry Forward), LLR(Link Loss Return)
- AUTO MDI-X
- 19" Rack Bracket(Internal Power Type)

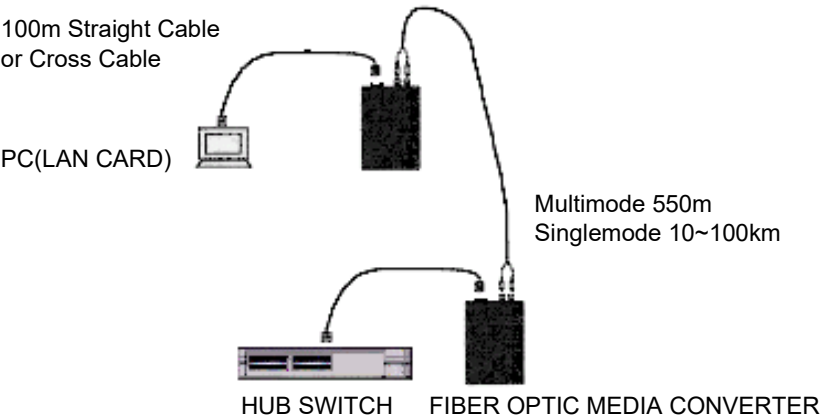
1.4 Specifications

- Standards : IEEE802.3ab(1000Mbps CSMA/CD)
- IEEE802.3 (10Mbps CSMA/CD)
- Connectors : RJ45-STP & Fiber SC
- Cables : Cat.5 UTP/STP
- 62.5/125 μ m Multimode Fiber
- 9/125 μ m Singlemode Fiber
- Data Transfer Rate : UTP(10/100/1000Mbps), Fiber(1000Mbps)
- Temperature : 0°C ~ 60°C (32°F~122°F)
- Humidity : 5% ~ 95%
- Dimension : 97mm(D)*71mm(W)*26mm(H)
- Power Requirement : 12V, 1.0A(AC-DC Adapter)

1.5 Fiber Optic Specification

SFC2000	TS	TL10	TL80	TWL	SFP
Connector Type	SC	SC	SC	SC	Mini-GBIC
Fiber Type	MM	SM	SM	SM	
Wave Length	850nm	1310nm	1310nm	1550nm/1310nm	
Typical Distance	550m	10km	80km	10km	
Min. TX PWR	-19	-15	-5	-5	
Max. TX PWR	-14	-8	0	0	
Sensitivity	-30	-34	-34	-34	

2. INSTALLATION



2.1 Procedure

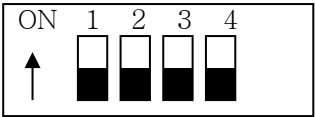
Fiber cable connections must be matched Transmit port to Receive port.. Attach a UTP cable from the 10/100/1000Base network to the RJ-45 port on the converter.

Connect the power adapter to the converter and check that the power LED light up.

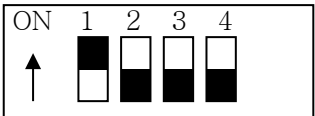
The TX Link and FX Link LEDs will light when all the cable connections are satisfactory.

2.2 DIP Switch

	1	2	3	4
	Auto Nego.	TX Speed	TX Mode	LLCF
ON	Disable	100Mbps	Full Duplex	Enable
OFF	Enable	10Mbps	Half Duplex	Disable

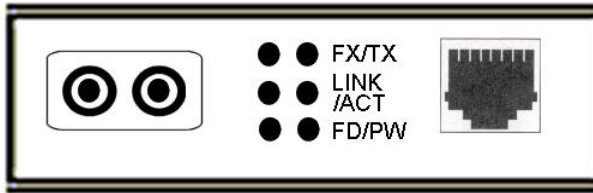


1. Dip Switch Default Setting
10/100Mbps Auto Sense
Half/Full Duplex Auto Sense
LLCF Disable



2. 100Mbps Full Duplex Setting
DIP1 ON Manual Mode
DIP2 OFF 100Mbps
DIP3 OFF Full Duplex
DIP4 OFF LLCF Disable

3. DISPLAY

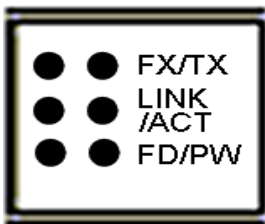


After the AC power line is "ON" and the DC plug is connected to the Fiber Converter, All of the LEDs are "ON" and "OFF" for the self-testing and "PW", "FX" LEDs are still "ON".

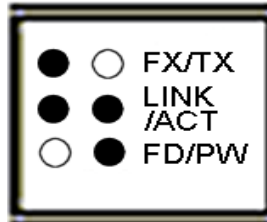
3.1 LEDs

- ① FX : Lit(always) when Fiber Optic Module Active. Green
- ② TX : Lit when TX is 100Mbps mode. Green
Off when TX is 10Mbps mode.
- ③ LINK/ACT(FX) : Lit when Fiber cable Link is good with the remote device. Green
Blinks when any FX traffic is present(ACT).
- ④ LINK/ACT(TX) : Lit when UTP cable link is good with the remote device. Green
Blinks when any TX traffic is present(ACT).
- ⑤ FD : Lit when Full Duplex Mode is enable. Green
Blinks when the collision is present on Half Duplex Mode.
- ⑥ PW : Lit when DC Power is good. Green

3.2 Example



100Mbps Full Duplex Mode



10Mbps Half Duplex Mode