

## 10/100/1000 Base TX to 1000 Base FX Fiber Ethernet Media Converter, Model SC09FENG

### Brief introduction

This product supports 1000Base-TX/FX protocol, as well as full duplex & half duplex mode. This manual is for 10/100/1000M transceivers.

Model	Specification
SC09FENG-M	10/100/1000M, multi mode 2km,SC
SC09FENG-S	10/100/1000M, single mode 20km,SC
SC09FENG-S 40	10/100/1000M, single mode 40km,SC
SC09FENG-S 60	10/100/1000M, single mode 60km,SC
SC09FENG-S 80	10/100/1000M, single mode 80km,SC

### Packing list.

Please check the following items in the package before installing the transceiver.

Gigabit Ethernet optical transceiver	1set
AC/DC adapter (for external power unit)	1pc
User manual	1 copy

### Installation.

#### 1. Interface

##### RJ-45 Interface

The transmission media uses CAT5 twisted-pair with the typical length of 100 meter. Fiber interface

SC/ST fiber interface is of duplex mode type, including two interface, namely TX & RX. When the two sets of optical transceiver are interfaced or connected to switch with fiber interface, the fiber is in cross connection, namely "TX-RX", "RX-TX"

#### 2. Connection

The network device (work station, hub or switch) with RJ-45 interface is connected to RJ-45 jack of optical transceiver through twisted pair. And the multi/single mode fiber is connected to SC/ST fiber interface of the optical transceiver.

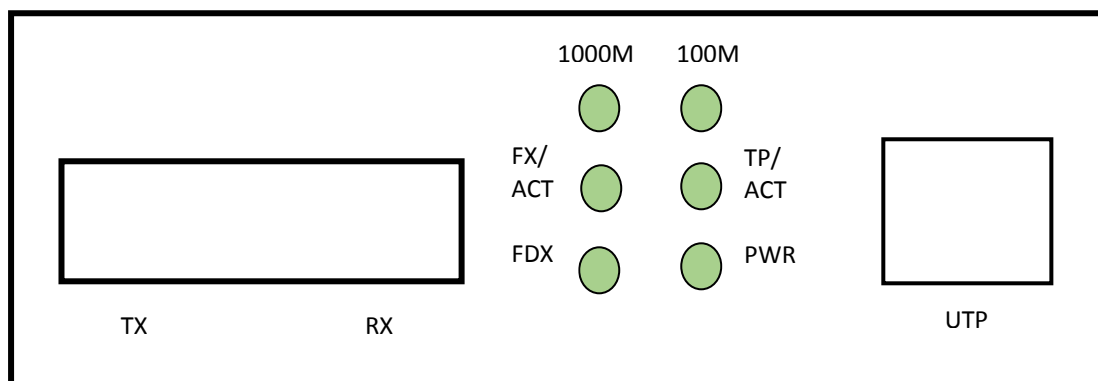


Fig.1 Schematic drawing of connection

Explanation for LED indicator lamp.

LED	Function	Status	Describing
PWR	Power LED	ON	Power is ON
		OFF	Power Failure.
100M	UTP port	ON	100M speed
	Speed LED Detect LED	OFF	No Fiber input.
FX/ACT	Fiber port link/action status  LED	ON	Fiber link is OK.
		Blink	Data is being received or transmitted.
		OFF	Fiber link fail.
1000M	UTP port speed LED	ON	1000M speed
TP/ACT	UTP port link/action status LED	ON	Link is ok.
		Blink	Data is being received or transmitted
		OFF	Link is fail.
FDX	UTP port duplex LED	ON	Full Duplex
		OFF	Half Duplex

Transmission characteristics of dual fiber transceiver:

Product Model	Optical wavelength (nm)	Optical power (dbm)	Sensitivity (dbm)	Transmission distance (Km)
SC09FENG -MM	850	-12~-15	<-20	0.55
SC09FENG -SM-20	1310	-3~-8	<-22	20
SC09FENG -SM-40	1310	0~-5	<-24	40
SC09FENG -SM-60	1310	0~-3	<-25	60
SC09FENG -SM-80	1550DFB	0~-1	<-25	80

### **Main features**

1. Max. 2M Buffer memory built in chip.
2. Back Pressure flow control for full duplex, IEEE802.3 X and half duplex.
3. Automatic identification of MDI/MDI-X.
4. High-performance 1.4Gbps memory bandwidth.

### **Technical Parameters:**

1. Standard Protocol: IEEE802.3 10 Base-T standard  
IEEE 802.3u 100Base-TX-FX standard
2. Connector: one UTP RJ-45 connector, one SC/ST connector
3. Operation mode: full duplex mode or half duplex mode
4. Power supply parameter: outside: 5V DC 2A
5. Environmental temperature: 0°C-60°C
6. Relative humidity: 5%-90%
7. TP cable: Cat5 UTP cable
8. Transfer fiber:  
Multi-mode: 50/125, 62.5/125 or 100/140  $\mu$  m  
Single mode: 8.3/125, 8.7/125, 9/125 or 10/125  $\mu$  m
9. Dimensions: 143mm x 77mm x 36mm (D x H x W)