



# Gigabit Media Converter



## Main Feature

1. Support 1000Base-FX optical fiber transmission standard
2. Automatic identification of MDI/MDI-X crosses line
3. 10/100/1000Mbps, full duplex/half duplex auto negotiation
4. Super lightning protection function which can resist lightning strike
5. Built-in high-efficiency switching core with CRC parity check
6. Support half-duplex back pressure control and full-duplex flow control

## Fiber features

Models	Fiber Connectors	Copper Ports	Fiber Transmission Distance	Fiber Type	Fiber Number	Wavelength	Dimensions (W × D × H)	Power
MC100GMA-05	1.25 Gbps SC	1 × 10/100/1000 Mbps RJ45	550 m	Multi-Mode	Dual Fibers	850 nm	26 × 70 × 94 mm	5 V / 1 A
MC100GSA-20			20 km	Single-Mode		1310 nm		
MC100GSA-40			40 km			1550 nm		
MC100GSA-60			60 km					
MC100GSA-80			80 km					
MC100GSA-100			100 km					
MC100GSA-20P	1.25 Gbps SC	1 × 10/100/1000 Mbps RJ45 PoE+ (802.3at/af)	20 km	Single-Mode	Dual Fiber	1310 nm	DC 47–57V	

## Installation

### 1. Interface

#### RJ-45 interface

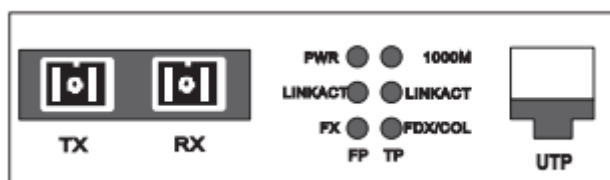
The transmission media adopts CAT5 twisted-pair with typical length of 100 meter. It features the function of automatically identifying the through line and crosswire.

#### Fiber interface

SC/ST fiber interface is of duplex mode type, including two interfaces, namely TX and 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”(direct butting for single optical fiber).

### 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. Then switch on. The corresponding LED is on for correct connection. (See the table below for the LED indicator lamp)



### Explanation for LED indicator lamp

LED indicator lamps serve as device monitoring and trouble display. The following is the explanation for each LED indicator lamp.

LED	Function	Status	Describing
PWR	Power LED	ON	Power is ON
		OFF	
FX	Fiber port signal detect LED	ON	Laser is receiving
		OFF	No laser
FX-LINK/ACT	Fiber port link/action status LED	ON	Fiber link is OK
		Blink	Data is been received or transmitted
		OFF	Fiber link is fail
1000M	UTP port speed LED	ON	1000M speed
		OFF	100M speed
TX-LINK/ACT	UTP port link/action status LED	ON	Link is OK
		Blink	Data is been received or transmitted
		OFF	Link is fail
FDX/COL	UTP port duplex LED	ON	Full duplex
		OFF	Half duplex