



# Model **MC** 220

10/100/1000Mbps Ethernet Media Converter

# 1.Overview

The media converter transforms the transmission media of Ethernet signal to optical fiber. It can extend the transmission distance to several kilometers or hundred kilometers.

All Media converters apply the new  $0.25\mu$ m technology to improve the performance and to avoid the packet lost with long the transmission. It also reduce the delay time to less than 9.6  $\mu$ s.

Using media converter is an economical solution to achieve long distance transmission base on current status.

### 1. Interface

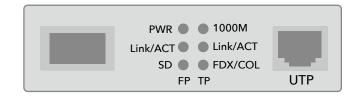
**RJ-45 interface**: One port 10/100/1000Base-Tx, the transmission media adopts CAT5e twisted-pair with typical length of 100 meter. It features the function of automatically identifying the through line and cross wire.

**Fiber interface:** One port SFP slot interface is used to connect to SFP module.

## 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 SFP Module is connected to SFP fiber interface. The corresponding LED is on for correct connection. (See the table below for the LED indicator lamp).

### Front panel



3. 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	Description
PWR	Power LED	ON	Power is ON
		OFF	Power is Fail
FX	Fiber port signal detect LED	ON	Laser is receiving
		OFF	No laser input
FX-LINK/AC	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	1000Mbps speed
		OFF	100Mbps speed
TX-LINK/ACT	UTP port link/action status LED	ON	UTP link is OK
		Blink	Data is been received or transmitted
		OFF	UTP link is fail
FDX/COL	UTP port duplex LED	ON	Full duplex
		OFF	OFF Half duplex

# 2. Main features

In conformity to IEEE 802.3 10 Base-T standard.
 In conformity to IEEE 802.3u 100 Base-TX/FX standard.
 In conformity to IEEE 802.3z 1000 Base-TX/FX standard.
 In conformity to IEEE 802.3x Flow control standard.

 Max. 2M buffer memory built in chip. Auto negotiation back pressure flow control for full duplex IEEE802.3 X and half duplex.
 Automatic identification of MDI/MDI-X cross line.
 High-performance1.4Gbps memory bandwidth. 5. In conformity to safety code of FCC and 15 CLASS B and CE MARK.

# 3. Technical parameters

- 1. Standard Protocol: IEEE802.3 10 Base-T standard IEEE 802.3u 100Base-TX/FX standard IEEE 802.3z 1000Base-TX/FX standard IEEE 802.3x Flow control standard
- 2. Connector: 1 UTP RJ-45 connector, 1 SFP connector
- 3. Operation mode: full duplex mode or half duplex mode
- 4. Power supply parameter:
  90-240Vac, 50/60Hz with outside switching adaptor: 5V DC power consumption: 4W
- 5. Environmental temperature: 0°C 60 °C
- 6. Relative humidity: 5%-90% none-condensing
- 7. BER < 1E-9
- 8. TP cable: Cat5 UTP cable 100m
- 9. Transfer fiber:

multi-mode: 50/125, 62.5/125 or 100/140µm

single mode: 8.3/125, 8.7/125, 9/125 or 10/125µm

10. Dimensions:

External power supply: 26mmx 70mm x 95mm