10/100/1000M MC with LFP function Specification

1、Product Features:

1. Built-in high-performance kernel, Broadcast storm control, Flow control, CRC error checking.

2. 1000Base-FX fiber-optic transmission standard, Can be interconnected with other products

3. Support IEEE802.1D Function

4. Completely compatible with IEEE802.3/802.3u auto-negotiation function

5. Maximum transmission distance up to 80Km

6. With LFP link detection function, Real-time monitoring can be realized on the link connection.

2、Product protocol

Follow IEEE802.3E/AB standards

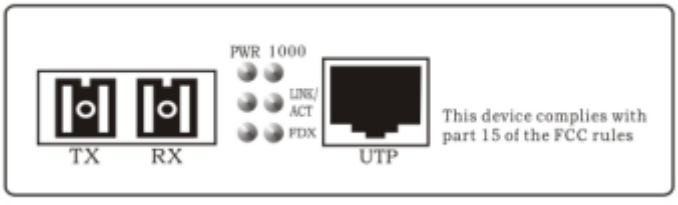
3、Product Category

1. according to the frame structure our MC product can be divided into: Desktop built-in power MC, the desktop external power MC, plug style MC, 17-slot rack-mounted MC

2. **according to the using number of fiber our MC product can be divided into：Single fiber MC, Dual-fiber MC**

3. By the use of optical fiber type：Multi-mode MC, Single-mode MC

4. Product transfer rate: 10/100/1000M adaptive，Front panel structure is as follows（For reference only, the real product appearance please prevail in kind）:



5. Back of the structure diagram

4、LED Indicator Status Description

Table4.1 The led of MC indicator Description

LED	function	status	Description
DUP	UTP port duplex LED	ON	Full duplex
		OFF	Half duplex
FP-LINK	Fiber port link/action status LED	ON	Fiber link is ok.
		OFF	Fiber link is fail.
PWR	Power LED	ON	Power is ON.
		OFF	Power is Fail.
RX	UTP port link/action status LED	ON	The electrical link in ok
		Blink	Data is been received or transmitted
		OFF	The electrical link in fail
1000	UTP port speed LED	ON	1000M speed
		OFF	10/100M speed
TX	UTP port link/action status LED	ON	The data send out

5、DIP switch instructions

Table 5.1 MC DIP switch instructions description

DIP-bit number	Switch status	Function descriptions
1	**ON**	LFP function enable
	OFF	LFP function disable
2/3	**OFF/OFF**	Store and forward mode
	OFF/ON	Modified cut through mode
	ON/OFF	Smart pass through mode
	ON/ON	Pass through mode
4	**ON**	Center MC
	OFF	Terminal MC

Note：To achieve the LFP function, First set the NO.1 DIP switch to ON, Second set the one of the two MC which inter-connect together to Center MC mode (means set the NO.4 DIP switch to on mode), and the other one set to MC terminal mode (means set the NO.4 DIP switch to off mode), if you set the both of them to ON or OFF mode, The UTP port can not be achieved LFP function.

6、Installation and Connections

1. Fiber optic transceivers are generally used in pairs, the typical connection is shown below

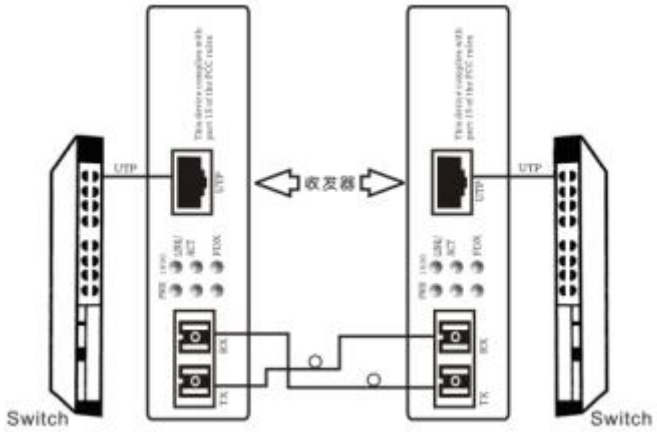


Figure 6.1 MC Connection diagram

2．Twisted pair connection

a. When directly connected to the PC, Twisted pair is parallel lines.

b. When Connected to the switch or hub,Twisted pair is crossover cable,Note：MC support MDI/MDIX function，twisted-pair type is not limited

3. Make the power adapter to plug to the outlet of the MC, at this moment the power indicator's PWR led will on, other LED will be blink or on when it detect the link state (Fiber Port or UTP Port) is established, If not detect the docking device, Only FDX lights ON, if you turn on the LFP function, Only the Power light ON.

7、Fiber transmission features:

Table7.1 MC Transmission features

Fiber mode	TX Power dBm	Rx Sen dBm	Wavelength	Distance
Multi-mode	-8~-3	<-24.0	850nm	550m

dual fiber				
Multi-mode dual fiber	-8~-3	<-24.0	1310nm	2 Km
Single-mode dual fiber	-8~-3	<-24.0	1310nm	10 Km
Single-mode dual fiber	-8~-3	<-24.0	1310nm	20 Km
Single-mode dual fiber	-5~0	<-24.0	1310nm	40 Km
Single-mode dual fiber	-3~+3	<-24.0	1550nm	60 Km
Single-mode dual fiber	0	<-24.0	1550nm	80 Km
Single-mode single fiber	-8~-3	<-24.0	A side:Tx1310nm/Rx1550nm B side:Tx1550nm/Rx1310nm	10 Km
Single-mode single fiber	-8~-3	<-24.0	A side:Tx1310nm/Rx1550nm B side:Tx1550nm/Rx1310nm	20 Km
Single-mode single fiber	-5~-0	<-24.0	A side:Tx1310nm/Rx1550nm B side:Tx1550nm/Rx1310nm	40Km
Single-mode single fiber	-3~-0	<-24.0	A side:Tx1310nm/Rx1550nm B side:Tx1550nm/Rx1310nm	60Km

8、Technical parameters:

- Standard：**IEEE802.3z/AB 1000Base-T/SX/LX/ZX**
- **Interface: Twisted Pair RJ45**
  Fiber：ST、SC 或 FC
  LED: PWR,FX Link/ACT,SD,TX-1000，TX-Link/ACT，FDX
- **Transmit rate：Twisted Pair 10/100/1000Mbps**
  Fiber 1000Mbps
- Duplex Mode：GE Port Full duplex or half duplex, Fiber port full duplex
- **Twisted Pair：Category 5E or Category 6**
- **Fiber：Multimode：50/125，62.5/125 um**
  Single-mode：8.3/125，8.7/125 um
  8/125，10/125 um
- **Power：power adapter：12V1A or 5V2A**
- **Ambient temperature：0～60℃**
- **Store temperature：-20～70℃**
- **Humidity：5%～90%，Non-condensing**
- **Volume：140×110×30mm(L×W×H)**

9、Packing list

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

Gigabit Ethernet optical transceiver	**1set**
AC/DC adapter (external)	**1pc**
Power line (built-in)	**1pc**
User manual	**1copy**

Please contact the dealer immediately for any loss or damage to the above items

Cautions:

1. This product is suitable for indoor application.

2. Put on the dust cover of fiber interface when not used.

3. It is forbidden to stare at the TX fiber-transfer end with naked eyes.

4. Single optical fiber transceiver must be used in pair (See the attachment description in delivery).