

## 10/100/1000M SFP Media Converter - Technical Specification

### 1. Introduction

10/100/1000M adaptive fast Ethernet optical Media Converter is a new product used for optical transmission via high-speed Ethernet. It is capable of switching between twisted pair and optical and relaying across 10/100 Base-TX/1000 Base-Fx and 1000Base-FX network segments, meeting long-distance, high-speed and high-broadband fast Ethernet workgroup users' needs, achieving high-speed remote interconnection for up to 100 km's relay-free computer data network. With steady and reliable performance, design in accordance with Ethernet standard and lightning protection, it is particularly applicable to a wide range of fields requiring a variety of broadband data network and high-reliability data transmission or dedicated IP data transfer network, such as telecommunication, cable television, railway, military, finance and securities, customs, civil aviation, shipping, power, water conservancy and oilfield etc, and is an ideal type of facility to build broadband campus network, cable TV and intelligent broadband FTTB/FTTH networks.



### 2. Overview

#### 2.1 Features

- In accordance with Ethernet standards  
IEEE802.3, 10/100Base-TX/1000Base-TX and 1000Base-FX
- Supported Ports: LC for optical fiber; RJ45 for twisted pair
- Auto-adaptation rate and full/half-duplex mode supported at twisted pair port
- Auto MDI/MDIX supported without need of cable selection



				(dBm)	y (dBm)	Range (km)
FLD-MC-ASGE-550M	850nm	LC	RJ-45	-8 ~ -3	≤-19	0.55km
FLD-MC-ASGE-2KM	1310nm	LC	RJ-45	-8 ~ -3	≤-20	2km
FLD-MC-ASGE-10KM	1310nm	LC	RJ-45	-8 ~ -3	≤-24	10km
FLD-MC-ASGE-20KM	1310 nm	LC	RJ-45	-8 ~ -3	≤-24	20km
FLD-MC-ASGE-40KM	1310 nm	LC	RJ-45	-5 ~ 0	≤-24	40km
FLD-MC-ASGE-60KM	1310 nm	LC	RJ-45	-3 ~ 3	≤-26	60km
FLD-MC-ASGE-60KM	1550 nm	LC	RJ-45	-5 ~ 0	≤-24	60km
FLD-MC-ASGE-80KM	1550 nm	LC	RJ-45	0 ~ 5	≤-24	80km
FLD-MC-ASGE-100KM	1550 nm	LC	RJ-45	0 ~ 5	≤-30	100km

### Desk Type Single-Optical Two-Way Media Converter

Product Mode	Wavelength (nm)	Optical Port	Electric Port	Optical Power (dBm)	Receiving Sensitivity (dBm)	Transmission Range (km)
FLD-MC-ASGE-550M	1310nm	LC	RJ-45	-8 ~ -3	≤-20	0.55km
FLD-MC-ASGE-2KM	1550nm	LC	RJ-45	-8 ~ -3	≤-20	0.55km
FLD-MC-ASGE-10KM	1310 nm	LC	RJ-45	-12 ~ -6	≤-24	3 km
FLD-MC-ASGE-20KM	1550 nm	LC	RJ-45	-12 ~ -6	≤-24	3 km
FLD-MC-ASGE-40KM	1310 nm	LC	RJ-45	-8 ~ -3	≤-24	10 km
FLD-MC-ASGE-60KM	1550 nm	LC	RJ-45	-8 ~ -3	≤-24	10 km
FLD-MC-ASGE-60KM	1310 nm	LC	RJ-45	-8 ~ -3	≤-24	20 km
FLD-MC-ASGE-80KM	1550 nm	LC	RJ-45	-8 ~ -3	≤-24	20 km
FLD-MC-ASGE-100KM	1310 nm	LC	RJ-45	-5 ~ 0	≤-24	40 km

## 3. Operating Environment

### 3.1 Operating Voltage

AC 220V/ DC +5V

### 3.2 Operating Humidity

Operating Temperature: 0°C to +50°C

Storage Temperature: -20°C to +70°C

Humidity: 5% to 90%

## 4. Quality Assurance

MTBF > 100,000 hours;

Replacement within one year and non-charge repair within three years guaranteed

## 5. Application Fields

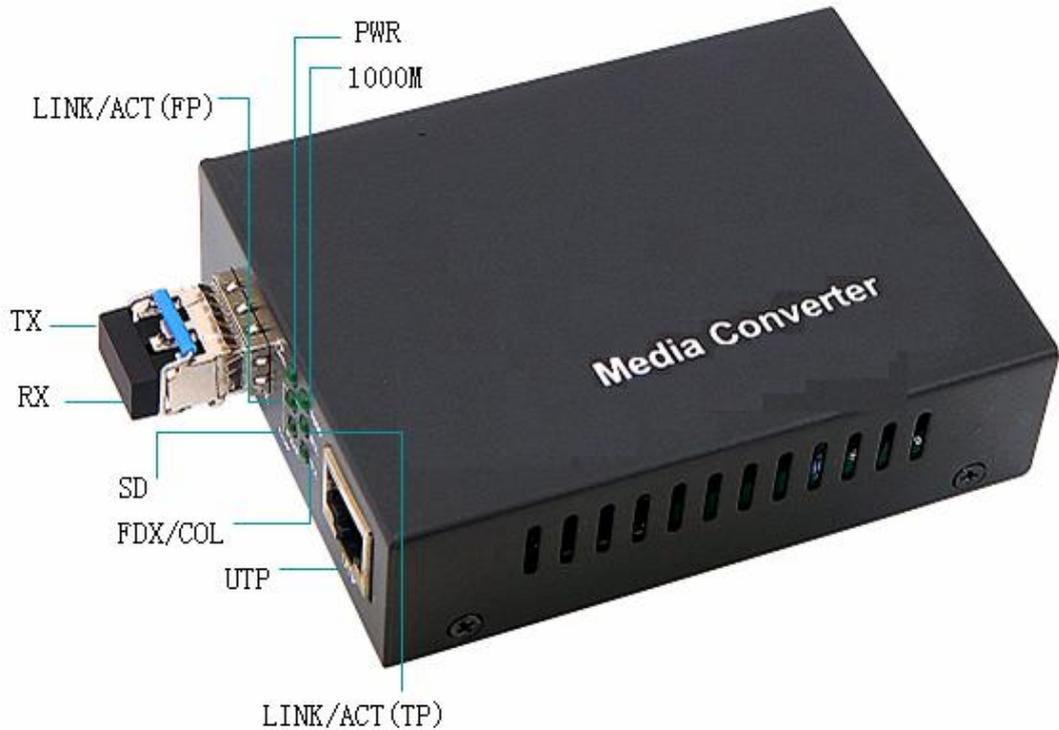
- For intranet prepared for expansion from 100M to 1000M
- For integrated data network for multimedia such as image, voice and etc.
- For point-to-point computer data transmission
- For computer data transmission network in a wide range of business application
- For broadband campus network, cable TV and intelligent FTTB/FTTH data tape
- In combination with switchboard or other computer network facilitates for: chain-type, star-type and ring-type network and other computer networks

## 6. Remarks and Notes

### 6.1 Instructions on Media Converter Panel

Instructions on Front Panel

Identification for front panel of the media converter is shown below:



a. Identification of Media Converter

TX - transmitting terminal; RX - receiving terminal;

b. PWR

Power Indicator Light – “ON” means normal operation of DC 5V power supply adaptor.

c. 1000M Indicator Light

“ON” means the rate of the electric port is 1000 Mbps, while “OFF” means the rate is 100 Mbps.

d. LINK/ACT (FP)

“ON” means connectivity of the optical channel; “FLASH” means data transfer in the channel; “OFF” means non-connectivity of the optical channel.

e. LINK/ACT (TP)

“ON” means connectivity of the electric circuit; “FLASH” means data transfer in the circuit; “OFF” means non-connectivity of the electric circuit.

f. SD Indicator Light

“ON” means input of optical signal; “OFF” means non input.

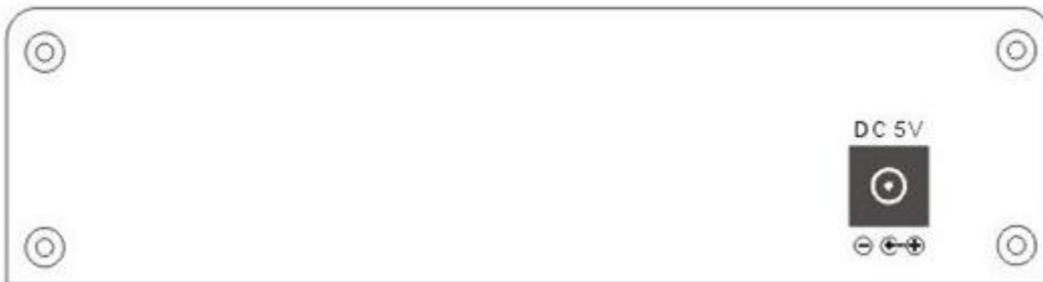
g. FDX/COL:

“ON” means full duplex electric port; “OFF” means half-duplex electric port.

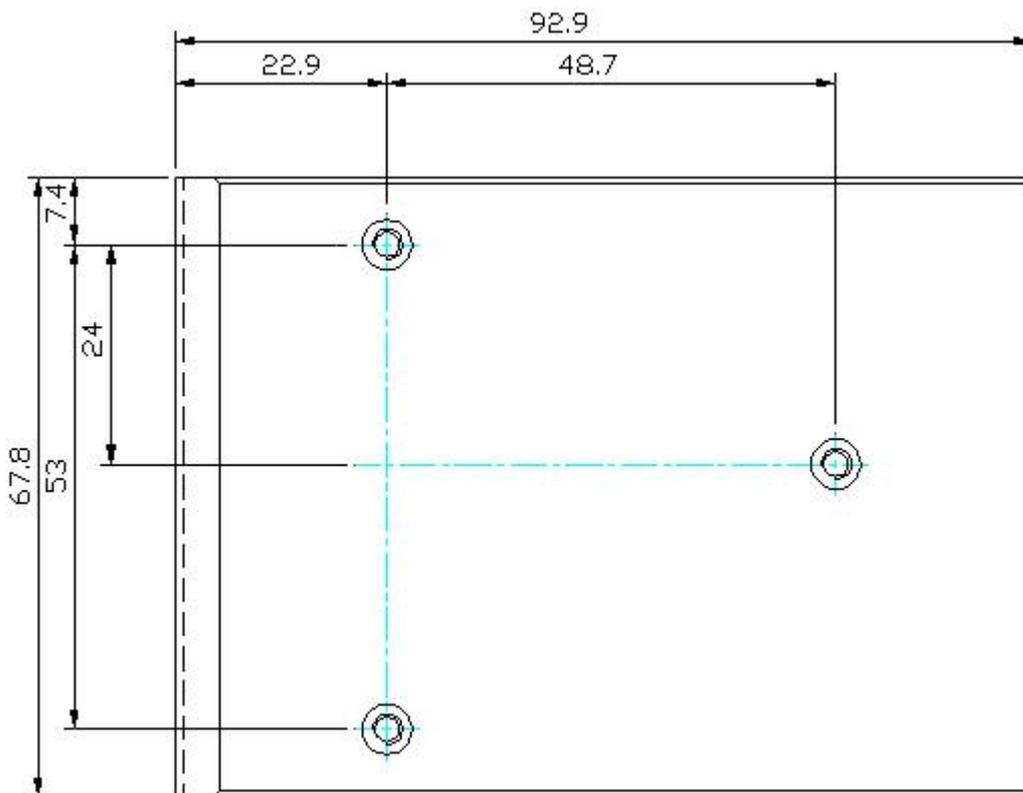
h. UTP

Non-shielded twisted pair port;

Instructions on Rear Panel



## 6.2. Mounting Dimensions Sketch



# FIBERLAND

Fiber Optic & Networking Products

*Let's create a pure fiberland for human beings*

## 6.3. Product Connection Diagram

