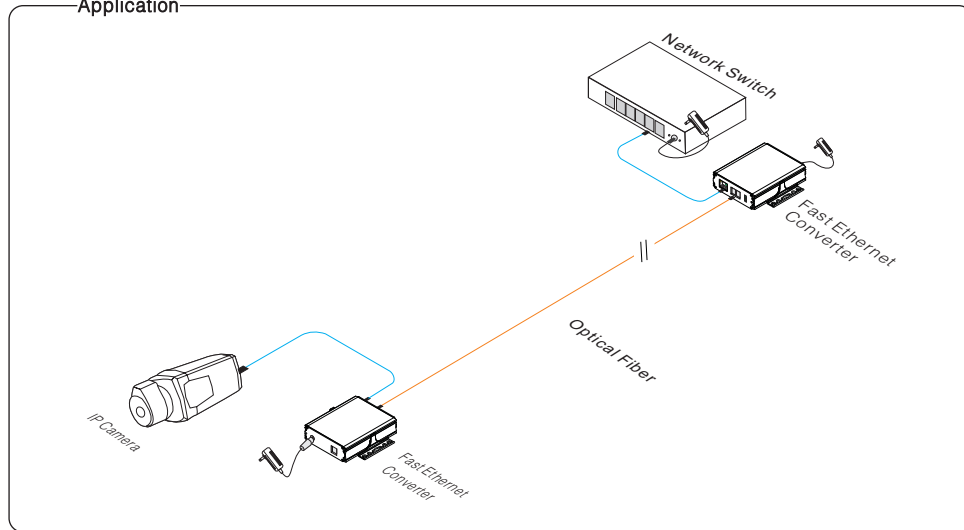


# Fast Ethernet Converter

It is fast Ethernet fiber optic transmission equipment which can convert between two different network cable and optical fiber transmission medium. Support 10/100 Mbps network bandwidth. This product can be used in pair and also can be used with other equipment. It is widely used in surveillance, home network fiber, etc.

## Application



## Feature

- Provide 1 100 Mbps fiber optic and 1 network port which can convert between network data, fiber optic and power;
- Using SFP optical module, support hot plug, different performance SFP optical modules are optional;
- Compatible with IEEE 802.3 10 BASE-T, IEEE 802.3 u 100 BASE-TX/FX Ethernet standards;
- Support 10/100 Mbps full/half duplex automatic adaptation, support automatic MDI/MDIX;
- Excellent circuit protection, effectively improve the lightning protection, anti-static products and anti-interference ability;
- Dynamic LED status indicator, real-time display the current working status, provide simple working status and troubleshooting;
- Support wide voltage DC12V~24V input;
- MIT compact aluminum shell structure design, convenient racks, desktop, wall installation.

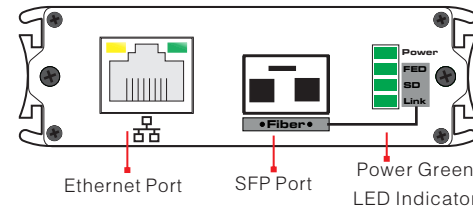


## Notice

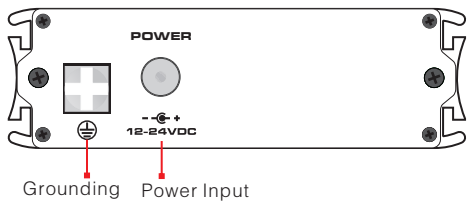
- 1) Please attention 2 optical fibers need to across connect with Fiber Port of two Media Converters;
- 2) SFP module need to purchase additional.

## Board Diagram

### Leftside



### Rightside



## Instruction:

- 1) Power refers to Power LED indicator; Optical fiber interface LED indicator of FED, SD, the LINK is refer to:  
 Link--indicating fiber port connection status. Bright: connection OK; Off: connection fail; Flicker: connection OK and have the data.  
 SD--Fiber port signal detection. Bright: optical fiber connection correct; Off: optical fiber connection fail.  
 FED--Remote fault mode receiving. Bright: 80 ms; Off: 20 ms; Often Off: Not receive.
- 2) Diagnosis of LED indicator fault as follow:

LED Indicators of Power & Ethernet	Fiber Link	Fiber SD	Fiber FED	Status
Bright	Bright	Bright	Off	Connect well
Flicker	Flicker	Bright	Off	Connect well, with data transmission
Off	Off	Bright	Off	Remote power port unable to connect
Off	Off	Off	Off	Fiber optical RX drops, TX/RX drops
Off	Off	Bright	Flicker	Fiber optical TX/RX drops

## Installation

Please check the following items before installation. If any missing, please contact the dealer.

- Fast Ethernet Converter 1pc
- Power Adapter 1pc
- MIT Hanger 2pcs
- User Manual 1pc

## Installation Steps

- 1) Please turn off the power related to the device before installation;
- 2) Please check if the network cables being taken up by other device;
- 3) Please connect LAN port of Fast Ethernet Converter and NVR or network device like computer with network cable;
- 4) Use two optical fibers with single-mode double fiber connect with fiber port of two Fast Ethernet Converters. Pay attention to the optical fiber connection interface RX and TX line should be CROSS connection. That is: one end of optical fiber line connected to the module TX interface, the other end should be connected to the RX interface;
- 5) Please check if the installation is correct and power the system;
- 6) Please check if the network is working.

## Specification

Item	Description	
Power	Power Supply	Power Adapter
	Power Voltage	DC12V~24V
	Consumption	<5W
Ethernet Port	Ethernet Port	LAN: 10/100Mbps
	Transmission Distance	LAN: 0~100m
Fiber Port	Fiber Port	SFP, Single Fiber & Double Fiber Optional
	Bandwidth	155Mbps
	Transmission Distance	SFP Module of 20km, 40km, 60km, 80km, 120km Optional
Network Standard	Compatible with	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX
LED Status Indicator	Power	Green
	Ethernet	Green on RJ45
	Fiber	FED, SD, LINK 3 Green LEDs
Protection	ESD	Contact Discharge 6KV; Air Discharge 8KV
	Lighting Protection	Power: 2KV Signal: 1KV Per: IEC61000-4-5
Environmental	Working Temperature	-20°C~55°C
	Storage Temperature	-40°C~70°C
	Humidity (Non Condensing)	0~95%
Mechanical	Dimension (L*W*H)	103mm x 82mm x 25mm
	Material	Aluminum Alloy
	Color	Black
	N.W.	172g
Stability	MTBF	>30000h

Product are subject to change without prior notice

## Trouble Shooting

Please find the following solution when the device doesn't work

- Please confirm if the installation is correct;
- Please confirm if the RJ45 cable order in accordance with the EIA/TIA568A or 568B industry standards;
- The maximum transmission distance is depend on the signal source and cable quality, please do not over the maximum transmission distance;
- Please replace a normal device with a failure one to check if the device is broken;
- If the problem still exist, please contact the factory.

## RJ45 Making Method

Instruments to be used: wire crimper, network tester.

Wire sequence of RJ45 plug should conform with EIA/TIA568A or 568B.

- 1) Shuck off about 2cm long the insulating layer, and bar the 4 pairs UTP cable;
- 2) Depart the 4 pairs UTP cable and straighten them;
- 3) Line up the 8 pieces of cables per EIA/TIA 568A or 568B;
- 4) Brunt cut the cables to leave 1.5cm bare wire;
- 5) Plug 8 cables into RJ45 plug, make sure each cable is in each pin;
- 6) Then use wire crimper to crimp it;
- 7) Repeat above 5 steps to make the another end;
- 8) Using network tester to test the cable whether is working.

pin	color
1	white/green
2	green
3	white/orange
4	blue
5	white/blue
6	orange
7	white/brown
8	brown



EIA/TIA 568A

pin	color
1	white/orange
2	orange
3	white/green
4	blue
5	white/blue
6	green
7	white/brown
8	brown



EIA/TIA 568B



Make sure if one end is EIA/TIA568A, the other end should also be EIA/TIA568A.  
Make sure if one end is EIA/TIA568B, the other end should also be EIA/TIA568B.