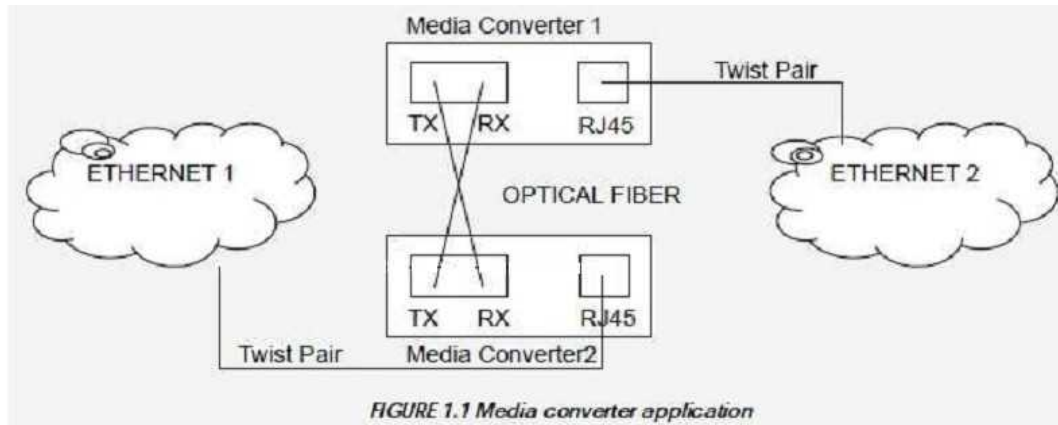


## General Description

The media converter transform the transmission media of Ethernet signal from CAT5 to optical fiber. it can extend the transmission distance to several kilometer or hundred kilometer.

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



Gigabit Ethernet 10/100/1000BaseTx to SFP slot fiber media converter has an SFP 1.25G slot for optical transceiver and one RJ-45 copper port with auto-negotiation 10/100/1000 and MDI/MDI-X features for the Gigabit Ethernet copper interface. It's working with dual fiber SFP, WDM SFP, DWDM SFP, CWDM SFPs, distance depends on the used model.

## Features

1. **Standard:** In conformity to IEEE 802.3 10 Base-T standard.  
In conformity to IEEE 802.3u 100 Base-TX, IEEE802.3z, IEEE802.3ab standard.
2. **Interface:**
  - One 10/100/1000 Mbps Ethernet port
  - Auto MDI/MDI-X support on RJ-45 port
  - One SFP slot for Gigabit links
  - Distance can reach 550M for Multimode and 120KM for single mode.
3. Built in high efficiency SRAM for packet buffer, with 1K-entry lookup table & 4-way associative hash algorithm.
4. **Half duplex:** back pressure flow control  
**Full duplex:** IEEE802.3x flow control
5. Automatic identification of MDI/MDI-X cross line.
6. Support jumbo packet 9K Bytes.
7. LED indicator shows and alarms the device's work activity.
8. Can be rack mounted in 14 slots chassis (external Power supply).
9. Both external and internal power supply are available.



Figure 2.1 10/100/1000M SFP media converter(external PSU)



Figure 2.2 1.25G SFP Media Converter

## Technical Parameter

Table 3.1 parameter

	10/100/1000M Multimode SFP Media converter	10/100/1000M Single SFP Media converter
<b>Operation Mode</b>	full duplex mode or half duplex mode	
<b>Connector</b>	One UTP RJ-45 connector, one LC connector	
<b>Power Supply</b>	outside: 5V DC 1A built-in: 110-265V AC or 48V DC	
<b>Jumbo Packet</b>	9KB	
<b>LED</b>	Link/Act: "ON" indicates that link is in correct connection. "Blink" indicates packet goes through media converter. Actives-status display of fiber port or RJ45 port PWR: "ON" indicates that Power is on and normal. FDX : "ON" indicates that Transceiver works in the full duplex mode. "OFF" indicates that Transceiver works in the half duplex mode.	
<b>Environmental temperature</b>	0~50 degrees	
<b>Transfer Fiber</b>	multi-mode: 50/125, 62.5/125 or 100/140µm single mode: 8.3/125, 8.7/125, 9/125 or 10/125µm	
<b>Relative Humidity</b>	5%-90%	
<b>Size</b>	94mm(L) x 71mm(W) x 26mm(H) (Power external type) 150mm(L) x 110mm(W) x 26mm(H) (Power internal type)	

Table 3.1 specification of Gigabit ethernet 10/100/1000Base TX to SFP media converter

## Order Information

**Table 4.1 Order Information Details**

	Product description	Unit	Part NO.
<b>10/100/1000 adaptive SFP Media Converter</b>	10/100/1000 adaptive SFP Media Converter without SFP module	Pcs	AK-C1002SFP
	With 1.25G SFP module of dual fiber,multi-mode,550M,850nm	Pcs	AK-C1002SFP-M-0.55
	With 1.25G SFP module of dual fiber,single-mode,10KM,1310nm	Pcs	AK-C1002SFP-S2 -10-
	With 1.25G SFP module of dual fiber,single-mode,20KM,1310nm	Pcs	AK-C1002SFP-S2 -20
	With 1.25G SFP module of dual fiber,single-mode,40KM,1310nm	Pcs	AK-C1002SFP-S2 -40
	With 1.25G SFP module of dual fiber,single-mode,60KM,1550nm	Pcs	AK-C1002SFP-S2 -60
	With 1.25G SFP module of dual fiber,single-mode,80KM,1550nm	Pcs	AK-C1002SFP-S2 -80
	With 1.25GSFP module of dual fiber,single-mode,120KM,1550nm	Pcs	AK-C1002SFP-S2 -120
	With 1.25G BIDI SFP module of dual fiber,multi-mode,2KM,1310/1550nm	pair	AK-C1002SFP-S1 -2
	With 1.25G BIDI SFP module of single fiber,single-mode,0~20 KM, 1310/1550nm	pair	AK-C1002SFP-S1 -20
	With 1.25G BIDI SFP module of Single fiber,single-mode,40KM,1310/1550nm	pair	AK-C1002SFP-S1 -40
	With 1.25G BIDI SFP module of single fiber,single-mode,60KM,1310/1550nm	pair	AK-C1002SFP-S1 -60
	With 1.25G BIDI SFP module of single fiber,single-mode,80KM,1490/1550nm	pair	AK-C1002SFP-S1 -80
	With 1.25G BIDI SFP module of single fiber,single-mode,100KM,1490/1550nm	pair	AK-C1002SFP-S1 -100
With 1.25G BIDI SFP module of single fiber,single-mode,120KM,1490/1550nm	pair	AK-C1002SFP-S1 120	

## Explanation of Part NO.

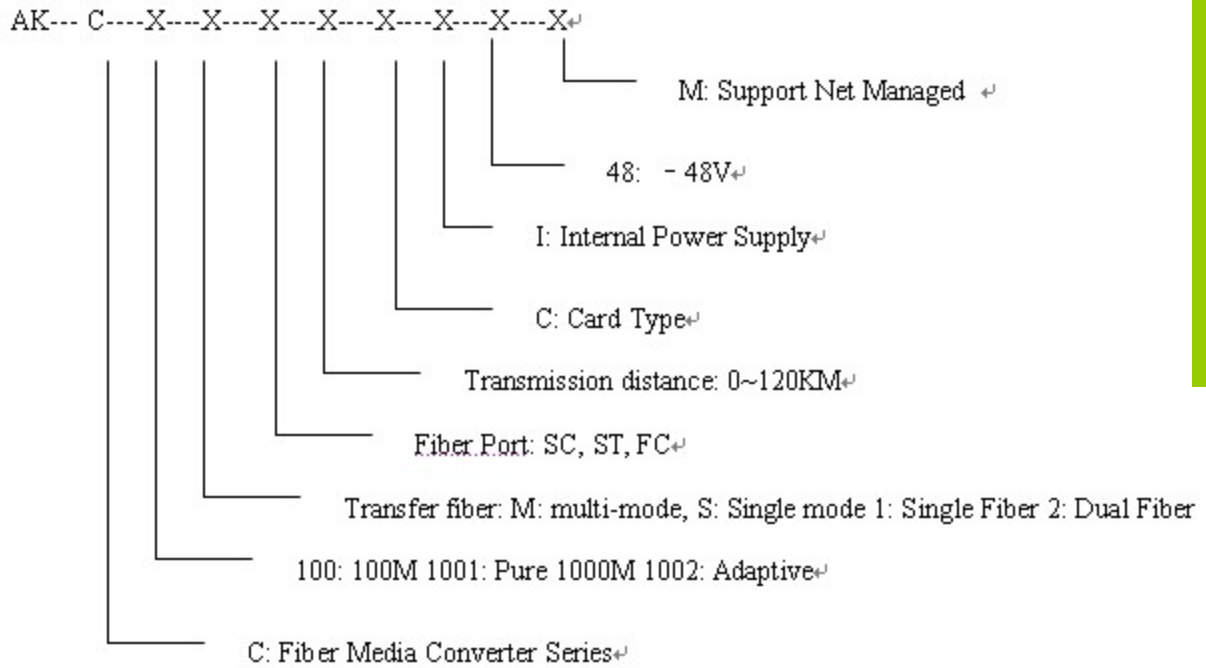


Figure 5.1 Explanation of Part NO.