

**Commercial Media Converter**  
10/100M, 10/100/1000M, 1000M, 10G Rates

Fiber Media Converter

Media Converter Rack

Fiber Switch

**User Manual**



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## Fiber Media Converter

### - Overview

The unmanaged fiber media converter is designed with a switch controller and buffer memory that connects two types segments operation smoothly. The converter can be installed into 2U 19" converter rack-mount chassis for centralized power.

Data Rate: 10/100Mbps, 10/100/1000Mbps.

Fiber Type: 550M/2KM for Multimode;20/40/60/80/120KM for Single mode.

Optic Connector: SC(default)/ST/FC/LC

### - Features

1. Built-in efficient exchange kernel,Broadcasting filtration function,flow control, CRC error check.
2. Supports SPANNING TREE to conduct fault-tolerant Network.
3. Supports 10/100Mbps or 10/100/1000Mbps full/half duplex self-adaptive transmission and auto-negotiations, easy upgrades.
4. Max.transmission distance can be 120km.
5. External power supply or Built-in power supply.
6. Standalone type can be installed into 14slot 2U Rack; Card type into 16slot Rack.
7. Hot-swap,High reliability.
8. Cache capacity: 1M Bits.
9. Built-in MAC address buffer space: 1K.

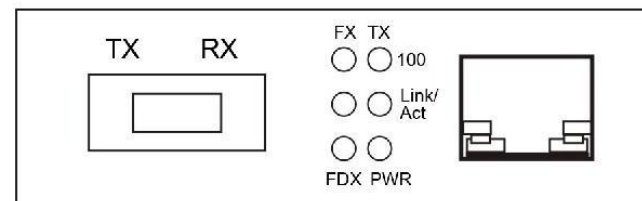
### - Standard Protocol

IEEE802.3 Ethernet standard

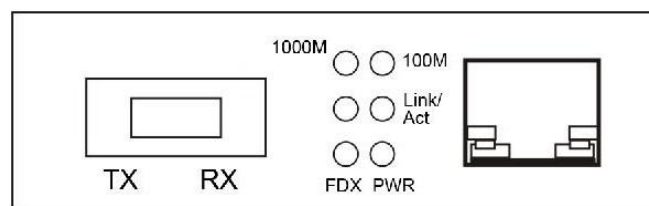
IEEE802.3u fast Ethernet standard

IEEE802.3d Spanning Tree standard

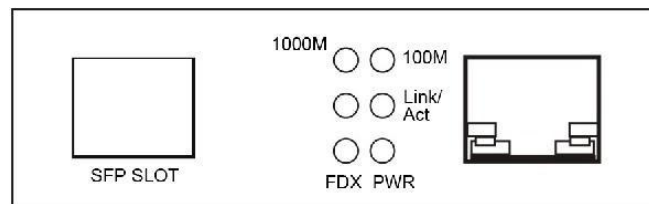
### - Front Panel of 10/100Mbps Media Converter



### - Front Panel of 10/100/1000Mbps Media Converter



### - Front Panel of SFP Media Converter



### - LED Indication

LED	FUNCTION	STATUS	OPERATION
PWR	POWER	ON	Power on
		OFF	Power off
FX	Optical Signal	ON	Connected
		OFF	Not link
TX	Ethernet	ON	Connected

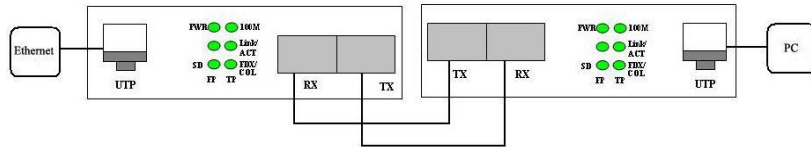
FDX	Ethernet	ON	Full duplex
		OFF	Half duplex
100	Ethernet	ON	100Mbps signal
		OFF	10Mbps signal
Link/Act	Fiber/Ethernet	ON	Connected
		FLASH	Data flow
		OFF	Not link
100M	Ethernet	ON	100Mbps signal
1000M	Ethernet	ON	1000Mbps signal

**- Technical parameter**

Items	10/100Mbps	10/100/1000Mbps
Transmission Type	Fast Ethernet	Gigabit Ethernet
Transmission Mode	10/100M Full/half duplex	10/100/1000M Full/half duplex
MTBF	>10.0000h	>10.0000h
BER	<1E-8	<1E-8
Data Buffer	1Mbits	1Mbits
Power Stability Factor	0.2mw/°C	0.2mw/°C
Input Power Range(dBm)	0~-30	0~-40
Operation Temperature	0°C~70°C	0°C~70°C
Storage Temperature	-45°C~80°C	-45°C~80°C
Maximum Current	800mA	800mA
Power	2.5w	2.5w
EMC	Accord with FCC Part15	Accord with FCC Part15
Volume	External: L×W×H 95×70×26mm	
	Internal: L×W×H 140×110×30mm	

**- Installation and Connection**

- \* When connecting to PC, twisted-pair are parallel lines.
- \* When connecting switch concentrator, twisted-pair are cross-wire.



- \* Optical interface must match single mode/multimode for Tx and Rx.
- \* Dual fiber, Tx and Rx must be with same wavelength; Single fiber, Tx and Rx as corresponding crossed wavelength.

**- Applicable optical cable**

- \* Multimode optical cable: 50/125um,62.5/125um,100/140um.
- \* Single optical cable: 8.3/125um,8.7/125um,9/125um,10/125um.
- \* UTP Cable: Cat5/5e,Cat6
- \* Confirm the input voltage of equipment:  
 110V/220V or 12V/24V/48V,then connect with corresponding power adapter,  
 PWR indicator will be on when suitable power supply.

## Optional - DIP SWITCH

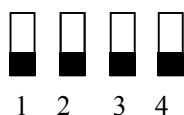


Figure 1 . Dip Switch

Dip Switch, Top position is ON, Low position is OFF

Table 1 .Dip Switch Function

No.	Switch Function	Description															
1	LFP	Link fault pass through(LFP) Default Disable status(OFF)															
2	Direct_Wire	Switch 2 and switch3															
3	Fast_FWD	<table border="0"> <tr> <td>Direct_Wire</td> <td>Fast_FWD</td> <td>Function Mode</td> </tr> <tr> <td>OFF</td> <td>OFF</td> <td>Store and forward switch</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>Modified cut-through switch</td> </tr> <tr> <td>ON</td> <td>OFF</td> <td>Converter Mode</td> </tr> <tr> <td>ON</td> <td>ON</td> <td>auto-change-forward</td> </tr> </table>	Direct_Wire	Fast_FWD	Function Mode	OFF	OFF	Store and forward switch	OFF	ON	Modified cut-through switch	ON	OFF	Converter Mode	ON	ON	auto-change-forward
Direct_Wire	Fast_FWD	Function Mode															
OFF	OFF	Store and forward switch															
OFF	ON	Modified cut-through switch															
ON	OFF	Converter Mode															
ON	ON	auto-change-forward															
4	TP_Force	TP_Force Speed_Mode Duplex_Mode															

Please check the following items from package before Installing the converter

- 1\* Fiber Media Converter
- 1\* Power Adapter
- 1\* User Manual

## Media Converter Rack - 2U Chassis

### - Overview

The Rack-mount Chassis is specially designed for managing media converters together. Standard 19" 2U size can be suitably mounted in 19inch racks. the chassis is able to accommodate up to 14/16pcs media converter, which can highly save the space and manage conveniently. It manages shelves and offers centralized power. The rack is hot-swappable, with redundant power supply, to provide a reliable, efficient and economical solution for network systems.

### - Features

- \* 2 cooling fans with air filters on the rear panel
- \* Allows the Hot-plugging for all media converters and power supplies
- \* Optional dual-power line inputs
- \* Over-voltage and over-current protections
- \* Supports AC110V/220V and DC48V
- \* Passive back-plane architecture, ensures the steady power input for each media converter
- \* Supports full line media converters

### - Specification

Slot: 14 for standalone type, 16 for card type  
 Suitable for: 10/100M, 10/100/1000M media converter  
 Power input: AC110V/220V or DC48V  
 Power output: DC5V12A  
 Diameter of DC Connector: 2.5/5.5mm  
 Ripple wave: ≤50Mv

Noise: ≤50Mv

Protection for power: over-voltage/current,short-circuit

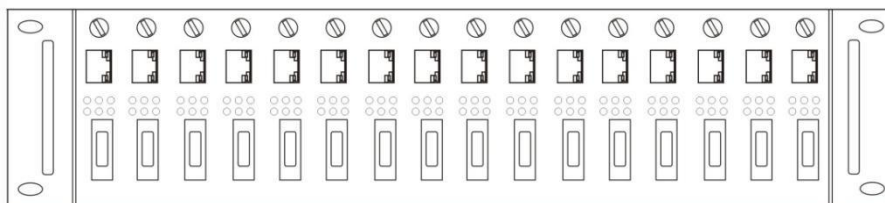
Operating Temperature: 0~50℃

Storage Temperature: -20~70℃

Humidity: 5~95%

Dimension: 490×230×90mm,19inch 2U height

Front Panel:



### - Installation

1. There are two ends for the three-wire power cord, plug one of the end into switch(220V), the other end into 220V AC power jack.Switch on the power supply when the device is working, LED of power will be on in green, fan will start rotating. For rack with dual power supplies: Turn on the two power switches, LEDs of power will be on in green, rack is working and fan starts rotating.
2. Switch off the power supply, remove the front plate, and insert into the media converter cards, then use it according to the second procedure. LED of power on the media converter will be on in green, other operations are same as media converter.

Please check the following items from package before Installing.

- 1\* 2U Rack
- 2\* Power Cable
- 1\* User Manual

### Fiber Switch

The unmanaged fiber switches transmit Ethernet signal over Fiber,all ports share the data together. They can extend the network transmission from 2km to 120km, realize the interconnection between motherboard server, Repeaters, hubs, switches, terminal. Plug and play design makes easy installation.

### - Features

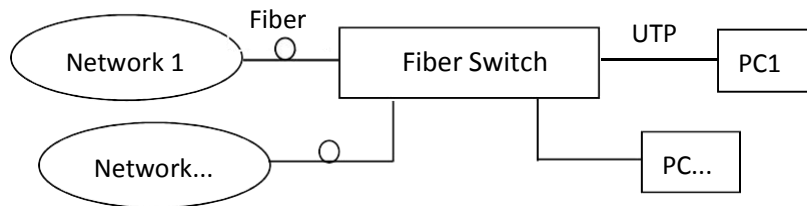
- \* In conformity to IEEE 802.3 10 Base-T,IEEE 802.3 100 Base-T,IEEE 802.3 1000 Base-T,IEEE802.3u 1000 Base-TX/FX, IEEE802.3X full duplex flow control,half duplex back pressure flow control and access protocol.
- \* Supports Jumbo Frame.
- \* 4K MAC address table, auto-update.
- \* Hot Plug-gable & Wall-Mountable.
- \* Stable performance more than 50thousand hours with fault-free.
- \* Unique IC solution applied.
- \* Auto MDI/MDI-X.
- \* In conformity with safety code of FCC, CE and RoHS.

### - LED Indicator

LED	Status	Explanation
FX-1/2/...	ON	Optical connected
	FLASH	Optical data flow
TP1/2/... Green Led	ON	Ethernet connected
TP1/2/... Yellow Led	FLASH	Ethernet data flow
PWR	ON	Power on

### - Installation

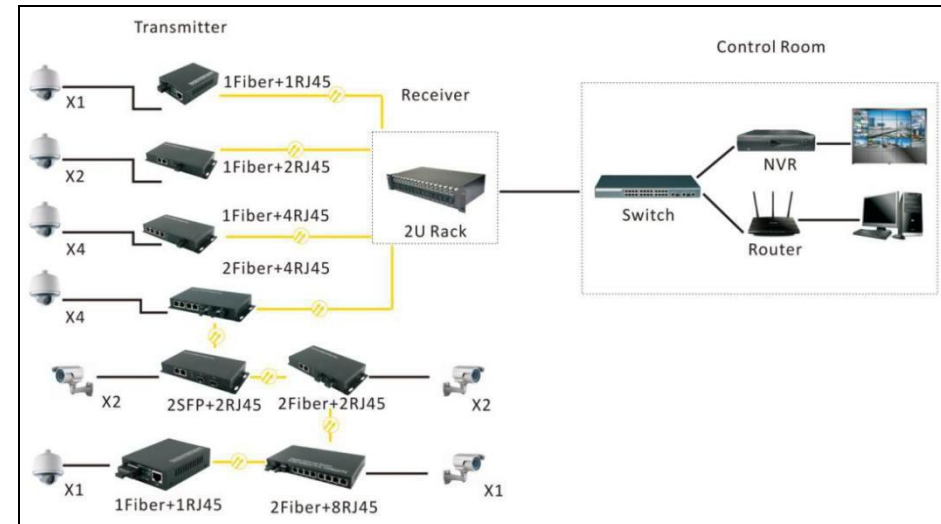
1. RJ45 Port supports Cat5,Cat6 twisted-pair to 120meter,and parallel cross-wire MDI-MDIX.
2. Fiber Port: 100M full/half duplex,1000M full duplex mode; SC/FC/ST/LC cable.
3. Connection: Fiber ports connect to Network, other RJ45 ports to Switch or PC, any of them can be as cascade port. Corresponding LED indicator will be on when connect to fiber or UTP cable.



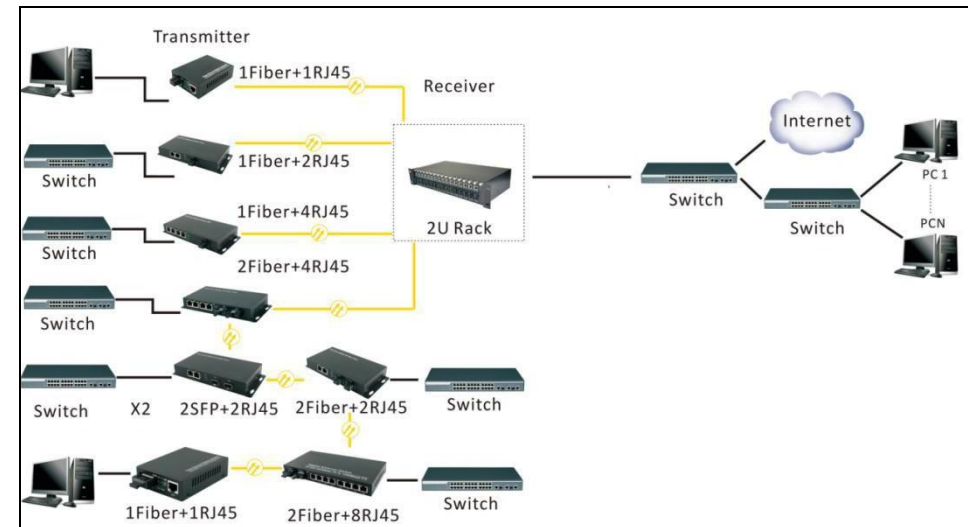
### - Specification

Data Rate	Ethernet 10M half duplex, 20M full duplex
	Fast Ethernet 100M half duplex, 200M full duplex
	Gigabit Ethernet 2000M full duplex
Structure	Hub and Spoke, cascade
Transmission	Store and forward
MAC address	Auto-update
Forwarding rate	10Base-T: 14881pps/port
	100Base-T: 148810pps/port
	1000Base-T: 1488095pps/port
Alternate input	220V/50Hz
Direct input	DC5V/1A
Max. consumption	5W
Temperature	Working: 0°C-50°C, Storage: -40°C-70°C
Humidity	5%~95%(no condensing)

### - Digital Video Fiber Transmission Solution



### - Network Fiber Transmission Solution



## Warranty Card

Product Information	
Purchase Date	
Product Name	
Model	
Factory Serial No.	
QC Inspector	
Customer Information	
Vendor Name	
Company	
Telephone	
Email	
Records of the Warranty	