

# IT-PMC-1200

## 2-ports 10/100M Media Converter (SM & MM)

## Introduction:

The Media Converter complies with IEEE802.3, IEEE802.3u, IEEE802.3x Standards. It is designed to convert data signal between 10/100 Base-TX and 100Base-FX fast Ethernet. It supports 10/100Base-TX and 100Base-FX applications. The data signal converted by such high performance media converter can be transmitted up to 120Km maximum by fiber-optical cable. The Converter is equipped one optic port and two RJ45 Jacks and one external power supply receptacle. Four LED indicators are built-in for easy diagnosing and monitoring the status of. It can be configured automatically for Full Duplex or Half Duplex operation.

## **Packing List:**

IT-PMC-1200 is shipped with following items.

- 1. IT-PMC-1200×1
- 2. 5VDC power adapter ×1(Media converter/5VDC)
- 3. User manual ×1



### Features:

- Accord to IEEE802.1 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3 100Base-FX
- 2. MDI/MDI-X auto negotiation, 10M/100M auto negotiation
- 3. Supports full /half duplex, Point-to-point transparent transfer
- 4. Power External 5VDC input
- 5. Plug-and-play, easy to installation
- 6. Can insert to 2U 19", 14 slots Rack (power external)

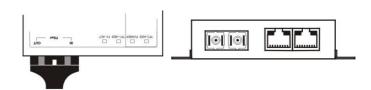
## **Pinout Configuration:**

#### Power

IT-PMC-1200 adopt the power supply input is 5VDC external.



### Ethernet (RJ45), Optical fiber interface



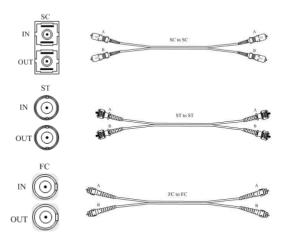
### Optical fiber interface:

Optic fiber interface need use in pairs, OUT port is fiber send side, connect another long-range light of interface fiber receive end IN; IN port is fiber receive side, connect long-range same fiber send side:

Optic fibers spent both ends mark the label (the following picture



show: A-A, B-B, can also mark another: A1-A2, B1-B2), in order to use.



**NOTE:** SC, ST or FC, for optic fiber interface, SM is look the same to MM for form. For example, IT-PMC-1200SM/SC, the optic fiber interface (SC) is look the same to IT-PMC-1200MM/SC.

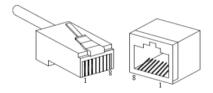
#### Ethernet interface:

2-port Ethernet (RJ45) interface supports MDI/MDI-X auto negotiation, can use straight-through cable connect PC or server, use a cross-over connect cable Switch or HUB.

MDI: PIN 1, 2, 3, 6 connects opposite.

MID-X:  $1\rightarrow 3$ ,  $2\rightarrow 6$ ,  $3\rightarrow 1$ ,  $6\rightarrow 2$ 

#### MDI/MDI-X 10Base-T/100Base-TX PIN define as follow:

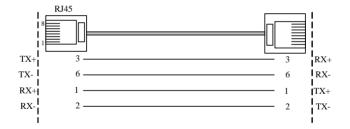




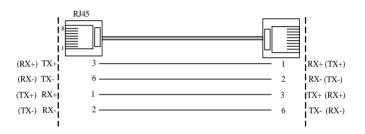
ППППП	PIN	MDI	MDI-X
	1	TX+	RX+
	2	TX-	RX-
	3	RX+	TX+
	6	RX-	TX-
	4, 5, 7, 8	_	_

Note: "TX±" Transfer data±, "RX±" Receive data±, "-" None.

#### MDI:



#### MDI-X:





## LED indications:

LED	STATE	INDICATION
FX-ACT (Fiber Link Port)	OFF	no link
	BRIGHT	link is ok
	FLASH	TX or RX activity
TP1-ADD (Ethernet Port1)	OFF	no link
	BRIGHT	link is ok
	FAST	transmitting or receiving at
	FLASH	100Mbps
	SLOW	transmitting or receiving at
	FLASH	10Mbps
POWER	OFF	no POWER
	BRIGHT	POWER is ok
TP2-ADD (Ethernet Port2)	OFF	no link
	BRIGHT	link is ok
	FAST	transmitting or receiving at
	FLASH	100Mbps
	SLOW	transmitting or receiving at
	FLASH	10Mbps

## **Specifications:**

Standards: comply with IEEE802.1 10Base-T, IEEE802.3u

100Base-TX, IEEE802.3 100Base-FX

RJ45 port rate: 10/100Mbps auto negotiation

Optic port rate: 100Mbps

Transfer distance: RJ45port: 100m

Fiber optic: 20, 40, 60, 80,120km(SM),

2, 5 km (MM) optional RJ45 port cable: UTP 5E



Fiber connector: 2×SC, 2×ST, 2×FC optional

Fiber optic cables: Single Mode:8.3/125,8.7/125,9/125 or 10/125

um

Muti-Mode:50/125.62.5/125um

Wavelength: 850nm, 1310nm, 1550nm Power supply: External 5VDC input

Dimensions: 94.0mm×71.0mm×26.0mm

Installation: support DIN-Rail installation

Operating temp:-10°C to 65°C

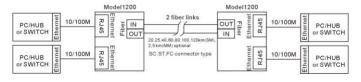
Storage temperature: -20 to 70°C

Operating humidity: 5% to 95 %( no condensation)

Warranty: 5 years

Approvals: FCC, CE, RoHS approvals

## **Applications:**



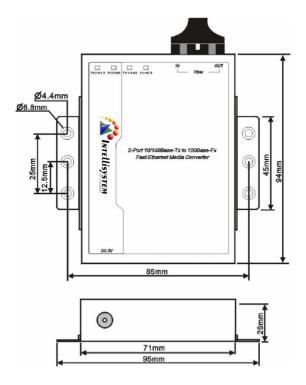
Extending 10/100M Ethernet data distance

### Installation:

IT-PMC-1200 provides DIN-rail and wall mounting two types of installation.

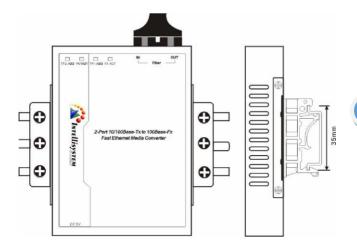


## Wall mounting installation





#### DIN-Rail Installation



## Troubleshooting instructions:

- 1. Make sure the power is connected and turned on.
- Make sure the converter Ethernet and fiber optic cables are connected properly.
- 3. Check the connections according to the connection diagram.
- Check the LED Indication status and identify possible problems from the Indication LED table above.

#### Note:

- Media Converter is a sensitive electronic item, please do handle with extra care on delivery, shifting and humidity.
- 2. This unit will be warranty for 5 years.
- Whenever there is a problem regarding the quality issue within the warranty period, we will take the responsibility to repair with free.
- After the warranty period, we will charge accordingly depending on the fault or damage.



5. Whenever there is a fault, you can contact our technical support after you identify the problem and the alarm.

### Common Problems:

## 1. PWR power supply indicator lamp not lighting

#### Cause:

- 1. Power supply not properly connected
- 2. Protector tube damaged
- 3. Power input tie-line in reverse connection
- 4. Internal power supply circuit with failure

#### Solution:

- 1. Check power switch and jack
- 2. Replace protector tube
- 3. Correct power supply line connection
- 4. Returned to the manufacturer for repair.

### 2. FX-ACT indicator lamp not lighting

#### Cause:

Optic fiber port link is fault.

#### Solution:

- 1. Check fiber optic is link or not.
- 2. Check fiber optic loss is high.
- 3. Clean the connector of optic interface.
- 4. Insert the well connector in place.
- 5. Returned to the manufacturer for repair.

### 3. TP1 (2)-ADD indicator lamp not lighting

#### Cause:

Ethernet port link is fault.



#### Solution:

- 1. Check Ethernet (RJ45) line is link or not.
- 2. Check Ethernet (RJ45) port is loose.
- 3. Check the rate of selected media converter.
- 4. Check the rate of Network.
- 5. Returned to the manufacturer for repair.

## 4. Network packet loss

#### Solution:

- 1. Check Ethernet rate or full/half duplex is matched or not.
- 2. Ethernet (RJ45) port is loose contact, or optic port is loose contact and soiled.
- 3. Ethernet cable not comply with Ethernet standard.

### Certifications:











