

# IT-PMC-1100 P2

**10/100M Media Converter  
(SM & MM)**

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## **Introduction:**

IT-PMC-1100 P2, 10/100M Media Converter, provides a cost effective plug-and-play solution for long-range 10Base-T or 100Base-TX Ethernet extensions and added benefit of 10/100 auto-negotiation, making it the perfect choice when planning future upgrades of 10Base-T networks. IT-PMC-1100 P2 Ethernet Fiber converters are ultra-miniature in size and feature a shielded RJ45 Ethernet jack, SC/ST/FC style fiber-optic connections. Built-in auto-sensing capabilities enable full or half-duplex Ethernet operation with no configuration required!

## **Packing List:**

IT-PMC-1100 P2 is shipped with following items.

1. IT-PMC-1100 P2×1
2. 5VDC power adapter ×1(Media converter/5VDC)
3. User manual ×1

## Features:

1. 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 Rackmount (power external).

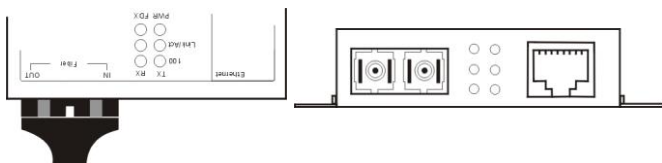
## Pinout Configuration:

### Power

IT-PMC-1100 P2 adopt the power supply input is 5VDC external.



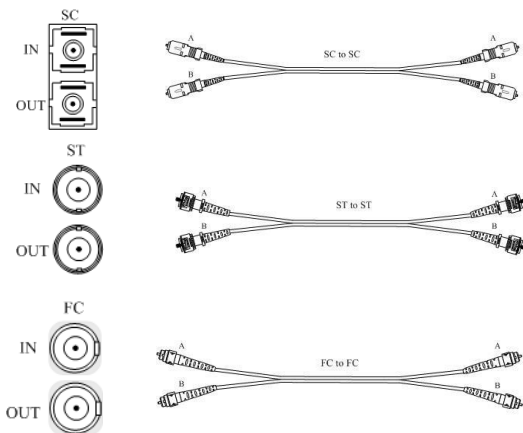
### Ethernet(RJ45), Optical fiber interface



### 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-1100 P2SM/SC, the optic fiber interface (SC) is look the same to IT-PMC-1100 P2MM/SC.

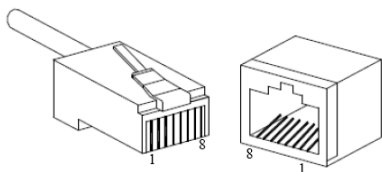
### Ethernet interface:

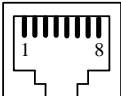
Ethernet (RJ45) interface supports MDI/MDI-X auto negotiation, can use straight-through cable connect PC or server, use across-over connect cable Switch or HUB.

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

MID-X: 1→3, 2→6, 3→1, 6→2

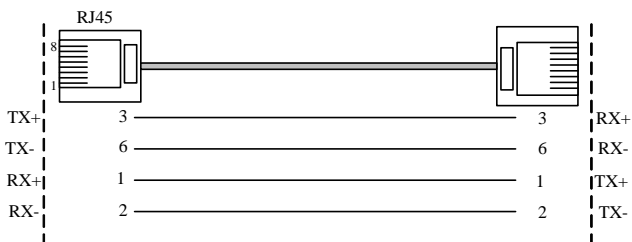
MDI/MDI-X 10Base-T/100Base-TX PIN define as follow:



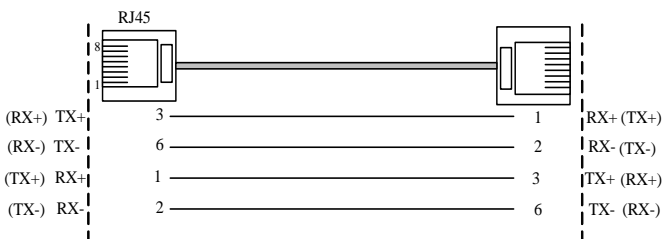
	PIN	MDI	MDI-X
	1	TX+	RX+
	2	TX-	RX-
	3	RX+	TX+
	6	RX-	TX-
	4、5、7、8	—	—

Note: “TX±” Transfer data±, “RX±” Receive data±, “—” None.

## MDI:



## MDI-X:



## LED indications:

LED	STATE	INDICATION
<b>PWR</b> (Power)	OFF	Power Off
	BRIGHT	Power On
<b>100</b> (10/100M)	OFF	10M Ethernet
	BRIGHT	100M Ethernet
<b>FX</b> (Fiber Link Port)	OFF	Fiber Optic Unit is Faulty
	BRIGHT	Fiber Optic Unit is Functional
<b>Link/Act (TX)</b> (TX Port Link/Activity)	OFF	Ethernet is not Connected
	FLASHING	Transmitting or Receiving Data
	BRIGHT	Ethernet is Connected
<b>Link/Act (FX)</b> (FX Port Link/Activity)	OFF	Fiber Links are not Connected
	FLASHING	Transmitting or Receiving Data
	BRIGHT	Fiber Links are Connected
<b>FDX</b> (Full Duplex/Collision)	OFF	Half-Duplex Mode or Network Disconnected
	FLASHING	Data Collision Detected
	BRIGHT	Full-Duplex Mode

## 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:50/125,62.5/125 um

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

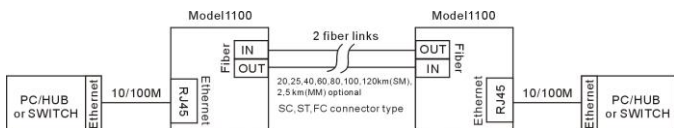
Storage temperature: -20 to 70°C

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

Warranty: 5 years

Approvals: FCC, CE, RoHS approvals

## Applications:

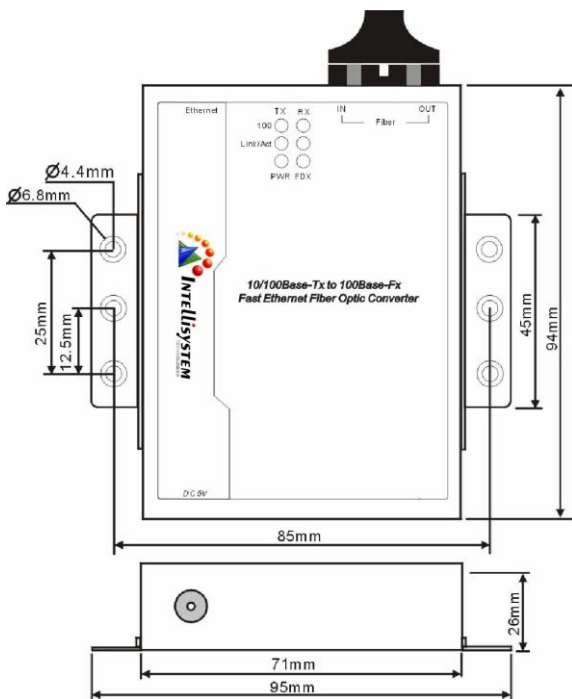


**Extending 10/100M Ethernet data distance**

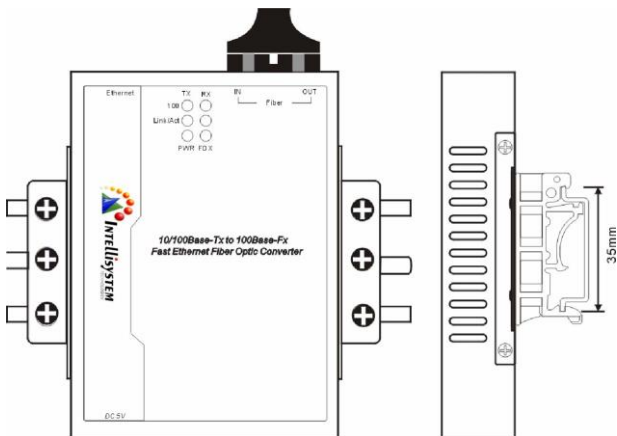
## Installation:

IT-PMC-1100 P2 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.
2. Make sure the converter Ethernet and fiber optic cables are connected properly.
3. Check the connections according to the connection diagram.
4. Check the LED Indication status and identify possible problems from the Indication LED table above.

### Note:

1. 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.
3. Whenever there is a problem regarding the quality issue within the warranty period, we will take the responsibility to repair with free.
4. 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 Port Link/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. TX Port Link/Act 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:

