

IPMC-111FB

► **Industrial mini type Ethernet to fiber PoE media converter with 1x10/100Base-T(X) P.S.E. and 1x100Base-FX, SFP socket**

Features

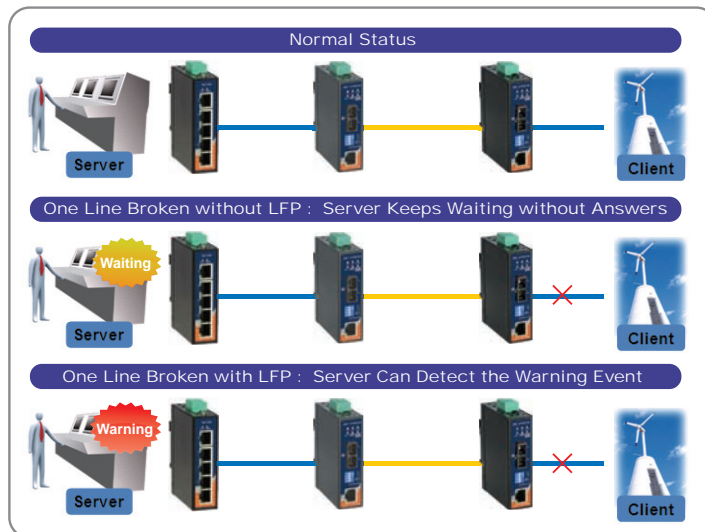
- Supports 1 port 10/100Base-T(X) P.S.E. auto-negotiation and auto-MDI/MDI-X
- Supports Ethernet to fiber conversion when an SFP module (SFP 100 Series) is installed on the SFP port
- Supports **LFP (Link Fault Pass-through)** function
- Supports full/half duplex operation
- The **P.S.E.** port is fully compliant with IEEE802.3at standard and provides up to 30 Watts of power
- Supports store-and-forward transmission
- Provides DIP-Switch to set functions
- Highly reliable and rigid IP-30 housing
- DIN-Rail and wall mounting enabled



Introduction

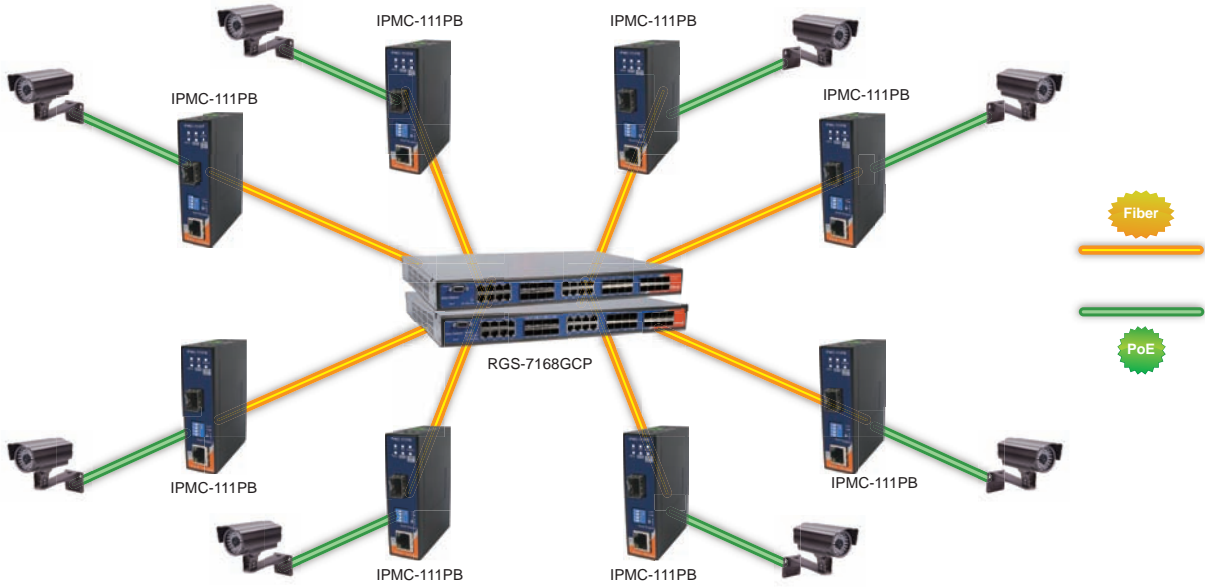
IPMC-111PB is a cost-effective solution for the conversion interface between 10/100Base-T(X) and 100Base-FX, allowing you to extend communication distance by optical fiber. IPMC-111PB supports MDI/MDIX auto detection so you don't need to use crossover wires. IPMC-111PB also supports IEEE 802.3at Power over Ethernet, a system to transmit electrical power up to **30 watts**, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. Each IPMC-111PB has 1x10/100Base-T(X) P.S.E. (Power Sourcing Equipment) port to provide power in a PoE setup. IPMC-111PB has wide operating temperature range from -40 ~ 70°C and accepts voltage range from dual 50 VDC power inputs, so it is suitable for harsh operating environments.

IPMC-111PB also supports the **LFP (Link Fault Pass-through)** feature. When one side of the link fails, the other side continues transmitting packets and waits for a response that never arrives from the disconnected side. Use the DIP-Switch to enable the LFP function, then IPMC-111PB will force the link to shutdown as soon as it notices that the other link has failed, to notice the administrator to react to the situation. Therefore, the IPMC-111PB is the reliable media converter with PoE capability and can satisfy most demands of different operating environments.



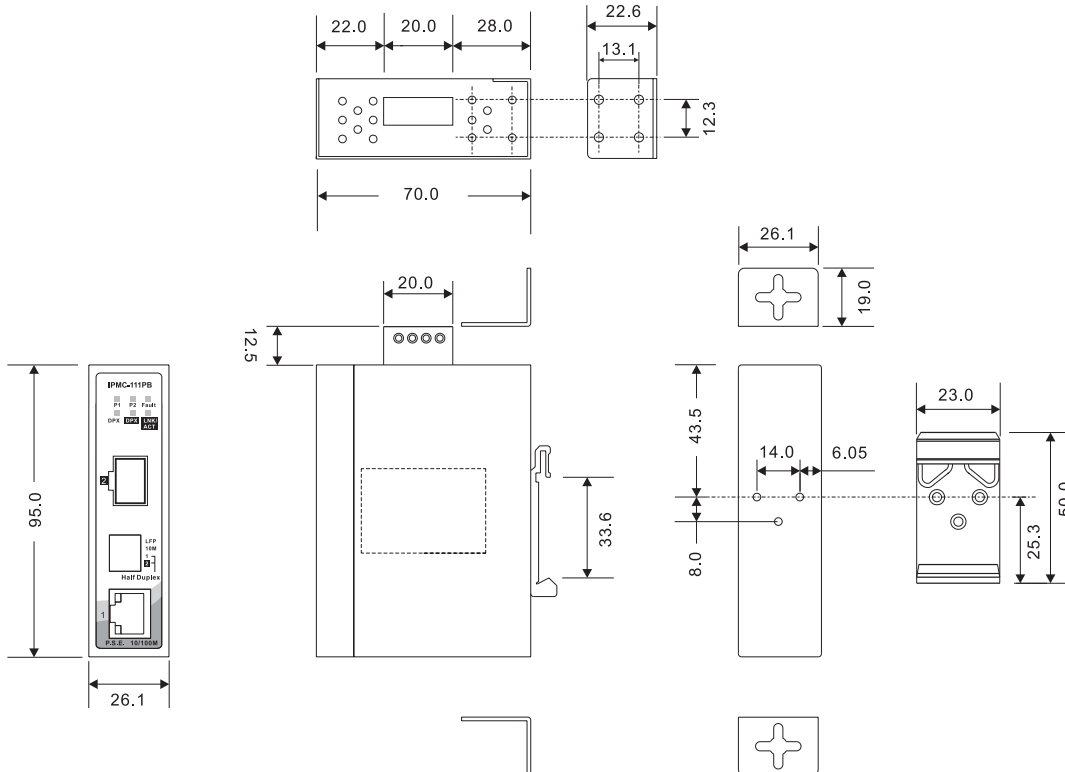
Connections of the LFP function

Practical Operation



Connections of the media converters

Dimensions



(Unit=mm)

Specifications

ORing Media Converter Model	IPMC-111PB
Physical Ports	
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	1
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3x for Flow control
Processing	Store-and-Forward
DIP-Switch setting	DIP-Switch 1 for LFP mode selection : (ON) enable / (OFF) disable DIP-Switch 2 for Ethernet speed selection : (ON) 10Mbps / (OFF) 100Mbps DIP-Switch 3 for Ethernet full/half duplex selection : (ON) Full-duplex / (OFF) Half-Duplex DIP-Switch 4 for fiber full/half duplex selection : (ON) Full-Duplex / (OFF) Half-Duplex
LED Indicators	
Power Indicator	Green : Power LED x 2
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act – (ON) Link up / (Blinking) Acting / (OFF) Link down Amber for 100Mbps/10Mbps indicator – (ON) Link at 100Mbps / (OFF) Link at 10Mbps Green for port duplex indicator – (ON) Full-Duplex / (OFF) Half-Duplex
100Base-FX Fiber Port Indicator	Green for fiber port Link/Act – (ON) Link up / (Flash) Acting / (OFF) Link down Green for fiber port duplex indicator – (ON) Full-Duplex / (OFF) Half-Duplex
LFP status indicator	Amber LED – (ON) LFP function fail / (OFF) LFP function disable
PoE indicator	Amber for P.S.E. indicator
Power	
Input Power	Dual 50 VDC power input at 4-pin terminal block
Power Consumption (Typ.)	31.2 Watts (P.S.E. output included)
Overload Current Protection	Present
Reverse Polarity Protection	Present
Physical Characteristics	
Enclosure	IP-30
Dimensions (W x D x H)	26.1 (W) x 70 (D) x 95 (H)mm (1.03 x 2.76 x 3.74 inch)
Weight (g)	210 g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 70°C (-40 to 158°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
Warranty	5 years

Ordering Information

IPMC-1 **A** **B** **C** **B**

Code Definition	10/100Base-T(X) Port Number	Fiber Port Number	Fiber Port Type
Option	- 1 : 1 port	- 1 : 1 port	- P : 100Base-FX SFP

Available Model	Model Name	Description
	IPMC-111PB	Industrial mini type Ethernet to fiber media converter with 1x10/100Base-T(X) P.S.E. and 1x100Base-FX, SFP socket
Packing List		Optional Accessories (Can be purchased separately)
<ul style="list-style-type: none"> • IPMC-111PB • DIN-Rail Kit • Wall-mount Kit • Quick Installation Guide 		<ul style="list-style-type: none"> • SFP100 series : 100Mbps SFP optical transceiver • DR-75-48, 75W DIN-Rail power supply(adjustable to 50 VDC) • DR-120-48, 120W DIN-Rail power supply(adjustable to 50 VDC)