

# IMC-1000WS-PB

## Industrial Managed PoE Media Converter

### 1x GbE RJ45 to 100/1000Base-X SFP with IEEE802.3bt PoE PSE (90W)

- » SNMP, Web Based, OAM, Remote Loop-Back Test
- » Supports LFPT (Link Fault Pass Through)
- » Support IEEE802.3af/at/bt Type 4 PoE up to 90W
- » CE and FCC Certified



Industrial managed media converter with 1 Gigabit UTP port and 1 100/1000Mbps SFP slot for copper and fiber interface conversion, it supports the PoE+ standard IEEE802.3af/at/bt to inject up to 90 watts of power into PoE devices, IMC-1000WS-PB is designed for harsh environments, such as IP surveillance, industrial networking, intelligent transportation systems (ITS) and is also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications.

## Features

- Conversion between 10/100/1000Base-T and 100/1000Base-X fiber cable interface
- Redundant 48VDC power input
- IP30 rugged metal housing and fanless
- Supports Jumbo frame 16K bytes packet
- DHCP, Auto Provision, SNMP, VLAN, QoS, Dual firmware image
- PoE PD auto check and auto Reset, Weekly schedule

## Specifications

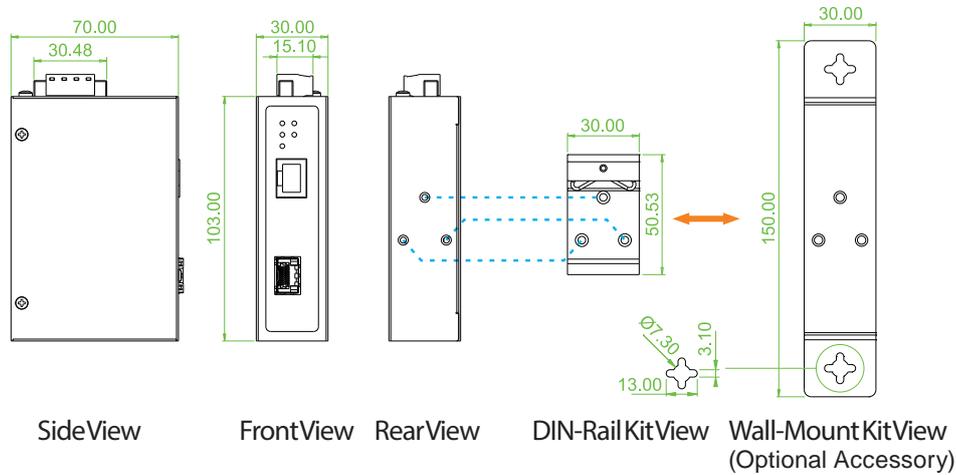
<b>Standard</b>	IEEE 802.3	10Base-T 10Mbit/s Ethernet
	IEEE 802.3u	100Base-TX, 100Base-FX, Fast Ethernet
	IEEE 802.3ab	1000Base-T Gbit/s Ethernet over twisted pair
	IEEE 802.3z	1000Base-X Gbit/s Ethernet over Fiber-Optic
	IEEE 802.3x	Flow Control and Back pressure
	IEEE802.3bt	PoE++
	IEEE 802.3at	PoE+ (Power over Ethernet enhancement)
	IEEE 802.3af	PoE (Power over Ethernet)
	IEEE 802.1q	Tag VLAN
<b>Fiber Ports</b>	SFP slot for 100Base-X or 1000Base-X, 100M/1000M speed set by Web	
<b>RJ45 Ports</b>	10/100/1000Base-T Auto MDI/MDI-X and Auto negotiation Function Supports UTP CAT.5e Twisted Pair cable	
<b>Push Button</b>	Reset, Load default setting	
<b>Data Process Architecture</b>	Pass Through or Store and Forward mode	
<b>Jumbo Frame</b>	16K bytes	
<b>LFPT (Link Fault Pass Through)</b>	Fiber-TX: If Fiber port link down, the media converter will force TX port to link down	
<b>Connector and Pin Assignment</b>	SFP Slot RJ-45 Socket: Cat 5e (10/100/1000Mbps) Twisted Pair cable Auto MDI/MDI-X and Auto negotiation Function	
<b>Connector and Pin Assignment</b>	RJ-45 Port support IEEE802.3af/at/bt End-Span, Alternative A mode PoE (V+): RJ-45 pin 1, 2, 4, 5 PoE (V-): RJ-45 pin 3, 6, 7, 8 Data (1, 2, 3, 6, 4, 5, 7, 8)	

<b>LED</b>	Per Unit: Power 1 (Green), Power 2 (Green) Fiber LNK/ACT (Green): ON : Connected to network, OFF: Not connected to network, BLK : Receive /Transmit data Fiber Speed: 1000Base-X (Amber), 100Base-X (Green) RJ-45 port Speed: 10 /100 (Green), 1000 (Amber) LNK/ACT for RJ45(Green): ON : Connected to network, OFF: Not connected to network, BLK : Networking is active PoE : On (Green): ON : PoE normal working, OFF : PoE No power output			
<b>Reverse Polarity Protection</b>	Supported for Power Input			
<b>Overload Current Protection</b>	Supported			
<b>Removable Terminal Block</b>	Provide for 2 Redundant power, 4 Pin			
<b>Operating Humidity</b>	5%~95% (Non-condensing )			
<b>Operating Temperature</b>	-20°C ~ 70°C			
<b>Storage Temperature</b>	-40°C ~ 85°C			
<b>Housing</b>	Rugged Metal, IP30 Protection and fanless			
<b>Dimensions</b>	70 x 30 x 103mm (D x W x H)			
<b>Weight</b>	245g			
<b>Installation</b>	DIN Rail mounting or wall mounting (Optional)			
<b>Power Supply</b>	48VDC (44~57VDC), Redundant power with polarity reverse protect function and removable terminal block Below recommend is for difference PoE application: 55~57VDC VDC for 90W (4 Pairs) 52~57VDC for 60W (4 Pairs) 52~57VDC for 30W (2 Pairs) 44~57VDC for 15.4W (2 Pairs)			
<b>PoE Power Budget</b>	90W			
<b>Power Consumption</b>	<b>Input Voltage</b>	<b>Total Power Consumption</b>	<b>Device Power Consumption</b>	<b>PoE Budget</b>
	55VDC	98.5W	5.0W	90W
<b>MTBF</b>	1,178,420 Hours (MIL-HDBK-217)			
<b>Certification</b>				
<b>EMC</b>	CE (EN55032, EN55035)			
<b>EMI</b>	FCC Part 15 Subpart B Class A, CE			
<b>EMS (Electromagnetic Susceptibility) Protection Level</b>	EN61000-4-2 (ESD) Level 3, Criteria B			
	EN61000-4-3 (RS) Level 3, Criteria A			
	EN61000-4-4 (EFT) Level 3, Criteria A			
	EN61000-4-5 (Surge) Level 3, Criteria B			
	EN61000-4-6 (CS) Level 3, Criteria A			
<b>Shock</b>	IEC 60068-2-27			
<b>Freefall</b>	IEC 60068-2-31			
<b>Vibration</b>	IEC 60068-2-6			

## Software Specifications

<b>Management</b>	Supports Web Management Supports IPv4/6 DHCP and Auto Provision Supports OAM and Remote Loop-Back Test Supports SNMP and Qos Firmware Upgrade by TFTP or Web Dual Firmware Image Supports 802.1Q tag VLAN
<b>Configuration</b>	IP Configuration, Password Setting, Converter Configuration, Port Configuration, VLAN Group Configuration, Alarm Configuration, PoE Configuration, Download/Upload Setting Parameter
<b>Diagnostic &amp; Monitor</b>	Supports Link Fault Pass-Through (LFPT) Function, Remote Loop Back Test and PoE Status
<b>PoE</b>	PoE Weekly Schedule, PoE PD Auto Checking & Auto Reset When PD Fail, PoE Configuration and Diagnostic PoE status

## Dimensions



## Ordering Information

Model Name	Managed	RJ45	SFP	PoE		Power Input	Certification		Operating Temperature
		10/100/1000 Base-T(X)	Dual Speed 100/1000Base-X	IEEE802.3 af/at/bt (PSE)	Power Budget	Redundant	CE	FCC	
IMC-1000WS-PBE	V	1	1	1	90W	48VDC	V	V	-20~70°C

### Related Product

IRC200-CH20	Industrial Converter Chassis, 20 Module slot
IRC200-2000MS	Industrial Managed 10/100/1000Base-T RJ45 to 100/1000Base-X SFP Media Converter for IRC200 Chassis
IMC-1001MS	Managed 10/100/1000Base-T RJ45 to 100/1000Base-X SFP Media Converter
IMC-1001CS	10/100/1000Base-T RJ45 to 100/1000Base-X SFP Media Converter

## Optional Accessories

### Wall Mount Kit

IND-WMK03	Wall Mount kit for Industrial product (Compact 150 x 30mm)
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### Industrial SFP Transceiver

The ISFP series of industrial grade SFP modules have been fully tested with all CTC Union industrial grade Ethernet switches for guaranteed compatibility and performance. Best performance can be guaranteed, even in mission-critical applications. (Please see CTC Union's Industrial SFP datasheets for more items and detailed information.)

ISFP-M7000-85-D(E)	Industrial SFP GbE 1000Base-SX, M/M, 500 meter, wave length 850nm, 7.5dB, LC, DDMI, -10~70°C (-40~85°C)
ISFP-S7020-31-D(E)	Industrial SFP 1000Base-LX, S/M, 20km, wave length 1310nm, 15dB, LC, DDMI, -10~70°C (-40~85°C)
ISFP-T7T00-00-(E)	Industrial SFP 10/100/1000Base-T UTP 100meter, -10~70°C (-40~85°C)
ISFP-M5002-31-D(E)	Industrial SFP 155M 100Base-FX, MM, 2km, wave length 1310nm, 12dB, LC, DDMI, -10~70°C (-40~85°C)
ISFP-S5030-31-D(E)	Industrial SFP 155M 100Base-FX, SM, 30km, 1310nm, 19dB, LC, DDMI, -10~70°C (-40~85°C)

### Industrial Power Supply

NDR-120-48	Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 120W, -20 ~ 70°C (For IMC-1000WS-PB)
NDR-240-48	Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 240W, -20 ~ 70°C (For more reserve)