12 IMC-1000S-PB

CTC Union

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

≫ *Supports LFPT (Link Fault Pass Through)*
≫ *Support Store & Forward, or Pass Through Mode*
≫ *CE and FCC Certified*

CE FC

Industrial unmanaged media converter with 1 Gigabit UTP port and 1 100/1000Mbps SFP slot for copper and fiber interface conversion, It supports PoE+ standard IEEE802.3af/at/bt and can inject up to 90 watts of power into PoE devices, meet the requirements of long-distance transmission and high power injection, fanless design, high MTBF, supports wide operating temperature, and redundant power input, it is suitable for heavy-duty applications in harsh environments such as industrial factory automation and data centers, intelligent transportation systems, military and utility market applications where environmental conditions exceed commercial product specifications.

Features

- Provides IEEE 802.3af/at/bt Type 4 PoE output (Up to 90W)
- Supports DIP SW for setting LFPT, Store & Forward or Pass through mode, and SFP speed
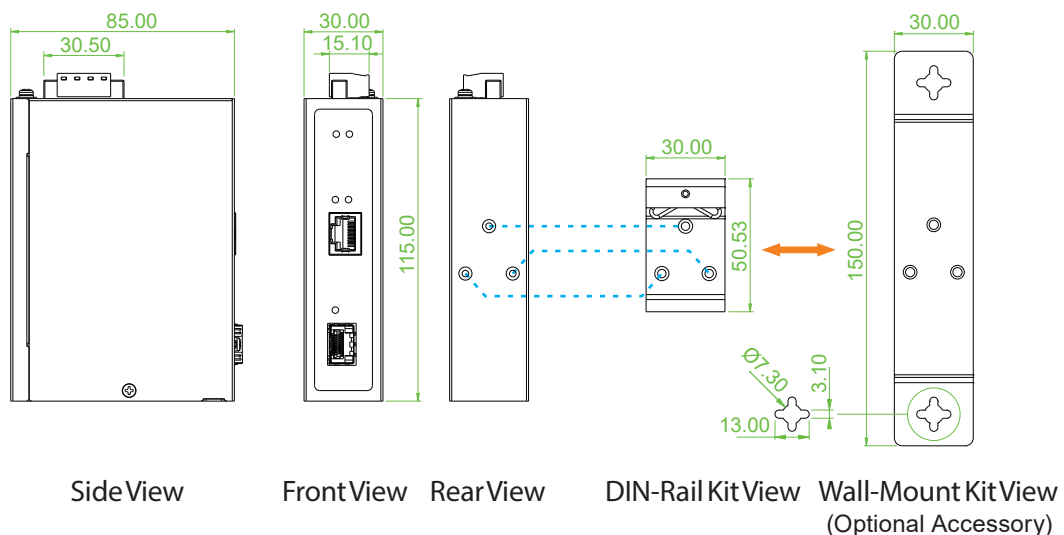
Specifications

Standard	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
	IEEE 802.3bt	PoE++
	IEEE 802.3at	PoE+ (Power over Ethernet enhancement)
	IEEE 802.3af	PoE (Power over Ethernet)
Fiber Ports	SFP slot for 100Base-X or 1000Base-X, 100M/1000M speed set by DIP SW	
RJ45 Ports	10/100/1000Base-T Auto MDI/MDI-X and Auto negotiation Function Supports UTP CAT.5e Twisted Pair cable	
Data Process Architecture	Store and Forward	
Jumbo Frame	16K bytes	
LFPT (Link Fault Pass Through)	TX- Fiber: If TX port link down, the media converter will force Fiber port to link down	
	Fiber-TX: If Fiber port link down, the media converter will force TX port to link down	
DIP SW	SW1	LFTP OFF : LFPT disable / ON: LFPT enable
	SW2	Data Process Architecture OFF : Store and Forward switch mode / ON : Pass through mode
	SW3	Fiber Speed OFF: 1000BaseX / ON: 100Base X
	SW4	Reserve

Industrial PoE Media Converter

Connector and Pin Assignment	SFP slot support 100/1000M SFP transceiver
	RJ-45 Socket: Cat 5e (10/100/1000Mbps) Twisted Pair cable
	Auto MDI/MDI-X and Auto negotiation Function
	Supports IEEE 802.3at/af 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)
LED	Per Unit: Power 1 (Green), Power 2 (Green)
	Fiber LNK/ACT: 1000 Link/Act (Amber), 100 Link/Act (Green), BLK: Networking is active
	RJ-45 Port: Speed: LNK/Act 1000 (Amber), LNK/Act 10/100 (Green)
	PoE Status (Green): ON : PoE normal working
Reverse Polarity Protection	Supported for Power Input
Overload Current Protection	Supported
Removable Terminal Block	Provides 2 redundant power PWR1 and PWR2, 4 Pin
Operating Humidity	5%~95% (Non-condensing)
Operating Temperature	-20°C ~ 70°C
Storage Temperature	-40°C ~ 85°C
Housing	Rugged Metal, IP30 Protection and fanless
Dimensions	85 x 30 x 115mm (D x W x H)
Weight	340g
Installation	DIN Rail mounting or wall mounting (Optional)
Power Supply	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)
PoE Power Budget	90W

Power Consumption	Input Voltage	Total Power Consumption	Device Power Consumption	PoE Budget
	54VDC	94.5W	3.8W	90W

MTBF	1,432,119 Hours (MIL-HDBK-217)
Warranty	5 years

Certification

EMC	CE (EN55035, EN55032)
EMI	FCC Part 15 Subpart B Class A, CE
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6

Dimensions

Side View   Front View   Rear View   DIN-Rail Kit View   Wall-Mount Kit View (Optional Accessory)

Industrial PoE Media Converter

Ordering Information

Model Name	RJ45	SFP	PoE		Power Input	Certification		Operating Temperature
	10/100/1000 Base-T(X)	Dual Speed 100/1000Base-X	IEEE803.3af/at/bt	Power Budget	Redundant	CE	FCC	
IMC-1000S-PB-E	1	1	1	90W	48VDC	V	V	-20~70°C

Optional Accessories

■ Wall Mount Kit

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

■ 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