

Industrial GbE PoE Media Converter

IMC-1001S-PH & IMC-1001-PH

- ◀ 1x GbE RJ45 to 1x 100/1000Base-X SFP with PoE PSE (30W)
- ▶ 1x GbE RJ45 to 1x 100/1000Base-X SC/ST with PoE PSE (30W)

- » Supports LFPT (Link Fault Pass Through)
- » CE and FCC Certified



The industrial grade unmanaged Gigabit PoE media converter with 1 Gigabit UTP port and features 1 SC/ST Gigabit fiber on IMC-1001-PH or 1 100/1000Mbps SFP slot on IMC-1001S-PH, used for copper cable to optical fiber interface conversion, supports PoE+ standard IEEE802.3af/at and can inject up to 30 watts of power into PoE equipment. They are designed for harsh environments such as IP surveillance, industrial networks, Intelligent Transportation Systems (ITS) are 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 SFP Fiber interface (IMC-1001S-PH)
- Conversion between 10/100/1000Base-T and 1000Base-X SC Fiber interface (IMC-1001-PH)
- Supports dual rate (100/1000) SFP for selectable Fast or Gigabit speed on fiber
- Provides IEEE 802.3at PoE output (30Watts)
- Provides a DIP-Switch to set functions
- IP30 rugged metal housing and fanless
- Wide operating temperature -20~70°C (IMC-1001S-PHE)
- Supports Jumbo frame 9K bytes packet

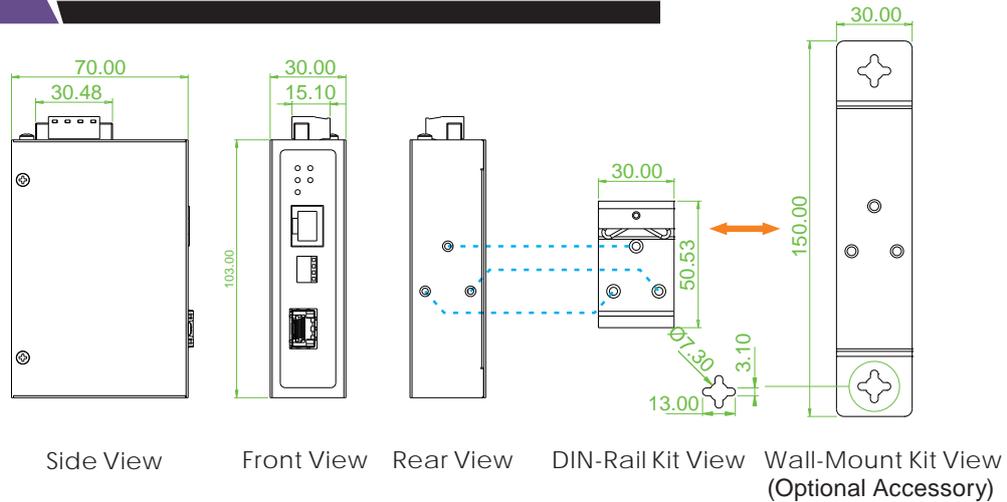
Specifications

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 802.3at	PoE+ (Power over Ethernet enhancement)
	IEEE 802.3af	PoE (Power over Ethernet)
	IEEE 802.1q	Tag VLAN
RJ45 Ports	10/100/1000Base-T Auto MDI/MDI-X and Auto negotiation Function, Supports UTP CAT.5e Twisted Pair cable	
Fiber Ports	100Base-X or 1000Base-X SFP slot (IMC-1001S-PH) 100Base-X or 1000Base-X set by DIP SW (IMC-1001S-PH) 100Base-X SC/ST (IMC-1001-PH)	
Data Process Architecture	Store and Forward mode or Pass Through mode Set by DIP SW	
Jumbo Frame	16K bytes	
Fiber Parameters	Fiber Cable (Multi-mode): 50/125um, 62.5/125um Fiber Cable (Single-mode): 9/125um Available distance: SFP, Distance depend on plug-in Fiber Transceiver	
Link Fault Pass Through (LFPT)	Fiber-TX: If Fiber port link down, the media converter will force TX port to link down	
Far-End Fault (FEF)	Work with LFPT to prevents data loss	

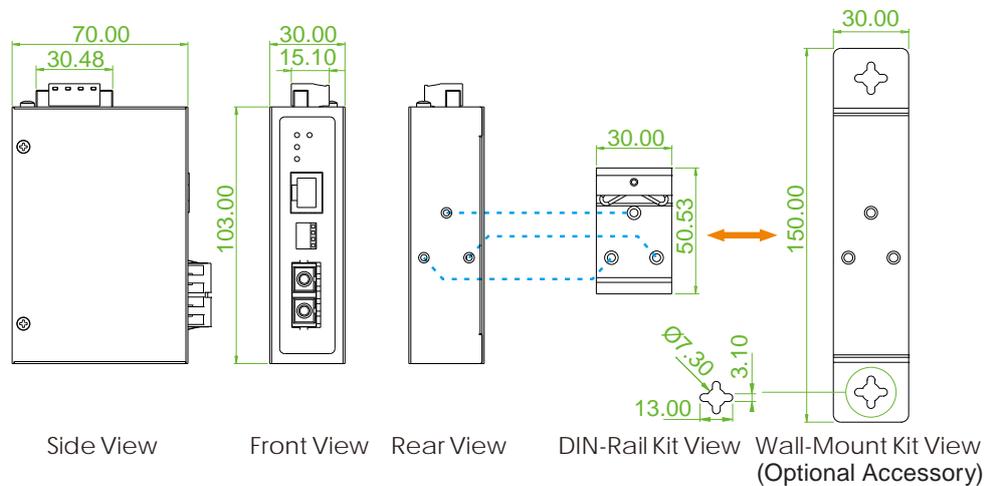
DIP Switch	SW1	Data Process Architecture Off : Store and Forward Switch Mode / On : Pass Through Mode		
	SW2	Off : LFPT Disable / On: LFPT Enable		
	SW3	SFP Fiber Speed Off: 1000BaseX / On: 100Base X (IMC-1001S-PH)		
	SW4	PoE Off: PoE Output Enable / On: PoE Output Disable		
Connector and Pin Assignment	100M or 1000M SFP Slot (IMC-1001S-PH)			
	1000M SC (IMC-1001-PH)			
	RJ-45 Socket: CAT.5e (10/100/1000Mbps) Twisted Pair cable			
	Auto MDI/MDI-X and Auto negotiation Function			
	RJ-45 Port supports IEEE 802.3at/af End-Span, Alternative A mode			
	PoE (V+): RJ-45 pin 1, 2.			
	PoE (V-): RJ-45 pin 3, 6. Data (1, 2, 3, 6, 4, 5, 7, 8)			
LED	Fiber Port: LNK/ACT: 100 (Green), 1000 (Amber) ON: Connected to network / OFF: Not connected to network / BLK: Networking is active			
	RJ-45 port: LNK/ACT: 10/100 (Green), 1000 (Amber) ON: Connected to network / OFF: Not connected to network / BLK: Networking is active			
	PoE Status(Green): ON: PoE normal working / OFF : PoE No Power output			
Reverse Polarity Protection	Supported for Power Input			
Overload Current Protection	Supported			
Power Supply	48VDC (44~57VDC), Redundant power with polarity reverse protect function and removable terminal block			
PoE Power Budget	30W			
Power Consumption	Input Voltage	Total Power Consumption	Device Power Consumption	PoE Budget
	48VDC	33.4W	3.2W	30W
Removable Terminal Block	Provides 2 redundant power, 4 Pin			
Operating Humidity	5% ~ 95% (Non-condensing)			
Operating Temperature	-20 ~ 70°C (IMC-1001S-PHE)			
Storage Temperature	-40 ~ 85°C			
Housing	Rugged Metal, IP30 Protection and fanless			
Dimensions	70 x 30 x 103mm (D x W x H)			
Weight	235g (IMC-1001S-PH)			
	240g (IMC-1001-PH)			
Installation	DIN Rail mounting or wall mounting (Optional)			
MTBF	1,639,119 Hours (IMC-1001S-PH)			
	997,294 Hours (IMC-1001-PH)			
	MIL-HDBK-217			
Certification				
EMC	CE (EN55032, EN55035)			
EMI	FCC Part 15 Subpart B Class A, CE			
EMS (Electromagnetic Susceptibility) Protection Level	EN61000-4-2 (ESD) Level 3, Criteria B			
	EN61000-4-3 (RS) Level 3, Criteria A			
	EN61000-4-4 (EFT) Level 3, Criteria A			
	EN 61000-4-5 (Surge) Level 3, Criteria B			
	EN 61000-4-6 (CS) Level 3, Criteria A			
	EN61000-4-8 (PFMF) Field strength 300A/m Criteria A			
Shock	IEC 60068-2-27			
Freefall	IEC 60068-2-32			
Vibration	IEC 60068-2-6			

Dimensions

▶ IMC-1001S-PH



▶ IMC-1001-PH



Ordering Information

Model Name	RJ45	Fiber	PoE		Power Input	Certification		Operating Temperature
	10/100/1000Base-T(X)		IEEE 802.3at (PSE)	Power Budget	Redundant	CE	FCC	
IMC-1001S-PHE	1	100/1G SFP	1	30W	48VDC	V	V	-20~70°C
IMC-1001-PHE	1	1G SC/ST	1	30W	48VDC	V	V	-20~70°C

Connector Type	Connectivity Distance
SC/ST (IMC-1001-PH)	001:500M (M/M) 002 : 2km (M/M) 020:20km (S/M) 040:40km (S/M) 020A: WDM 20km A type (TX:1310nm) 020B: WDM 20km B type (TX: 1550nm)type

* MOQ is requested for ST type

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, DDML, -10~70°C (-40~85°C)
ISFP-S7020-31-D(E)	Industrial SFP 1000Base-LX, S/M, 20km, wave length 1310nm, 15dB, LC, DDML, -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, DDML, -10~70°C (-40~85°C)
ISFP-S5030-31-D(E)	Industrial SFP 155M 100Base-FX, SM, 30km, 1310nm, 19dB, LC, DDML, -10~70°C (-40~85°C)

■ Industrial Power Supply

MDR-40-48

Industrial Power, Input 85 ~ 264VAC/120 ~ 370VDC, Output 48VDC, 40W, -20 ~ 70°C