CTC union°

IMC-1001S-PH

1x GbE RJ45 to 1x 100/1000Base SFP with PoE PSE (30W)

NEW

- CE, FCC certified
- Supports LFPT (Link Fault Pass Through) and FEF (Far End Fault)

CE FC

IMC-1001S-PH is a family of unmanaged Gigabit Ethernet media converters that support conversion between electrical 10/100/1000Base-T and optical 1000Base-X Ethernet and as PSE (Power Source Equipment) provides PoE+/PoE power over Ethernet. The IMC-1001S-PH utilizes an SFP cage for 100/1000Base-X compatible SFP modules. Housed in rugged DIN rail or wall mountable enclosures, the converter is designed for harsh environments, such as industrial networking, intelligent transportation systems (ITS) and is also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications.
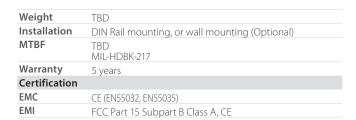
Features

- Conversion between 10/100/1000Base-T and 100/1000Base-X Fiber cable interface
- 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 100Base-X or 1000Base-X set by DIP SW
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)	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
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
	SW4 PoE Off: PoE Output Enable On: PoE Output Disable

Connector and Pin Assignment	SFP Slot
	RJ-45 Socket: CAT.5e (10/100/1000Mbps) Twisted Pair cable Auto MDI/MDI-X and Auto-Negotiation Function Support RJ-45 Port support IEEE 802.3at/af End-Span, Alternative A mode.
Connector and Pin Assignment	PoE (V+): RJ-45 pin 1, 2. PoE (V-): RJ-45 pin 3, 6. Data (1,2,3,6,4,5,7,8)
LED	Per Unit: Power 1 (Green) ,Power 2 (Green)
	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	TBD
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°C ~ 85°C
Housing	Rugged Metal, IP30 Protection and fanless
Dimensions	TBD

www.ctcu.com / sales@ctcu.com   Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

Weight	TBD			
Installation	DIN Rail mounting, or wall mounting (Optional)			
MTBF	TBD MIL-HDBK-217			
Warranty	5 years			
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

Ordering Information

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

■ Package List
- IMC-1001S-PH device
- Din Rail bracket with screws
- Terminal block
- Protective caps for SFP ports

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

■ Industrial Power Supply

MDR-40-48	Industrial Power, Input 85 ~ 264VAC/120 ~ 370VDC, Output 48VDC, 40W, -20 ~ +70℃