

# IMC-1000MS-PH12

1x GbE RJ45 to 100/1000Base SFP with PoE PSE (30W, 12/24/48VDC)

- ▲ 12/24/48VDC (9.6~57VDC) redundant dual input power
- ▲ Regulate PoE output voltage (52VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100meter
- ▲ SNMP, Web based and In-band management, Remote Loop-Back test
- ▲ Supports LFPT (Link Fault Pass Through) and FEF (Far End Fault)
- ▲ EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC certified













Industrial managed media converter with 1 Gigabit UTP port and 1 100/1000 SFP slot for copper and fiber interface conversion, Not only it supports the PoE+ standard IEEE802.3af/at to inject up to 30 watts of power into PoE devices, but it also supports 12Vdc boost. IMC-1000MS-PH12 converter 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
- Provides IEEE 802.3at PoE output (30W)
- IP30 rugged metal housing and fanless
- Supports Jumbo frame 9K bytes packet
- Ingress/Egress bandwidth control with 64K granularity
- PoE configuration and monitor
- Supports EMS Management

#### Specifications

Standard	IEEE 802.3	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				
Fiber Ports	SFP slot for 100Base-X or 1000Base-X, 100M/1000M speed set by Web					
RJ45 Ports	10/100/1000Base-T Auto MDI/MDI-X and Auto negotiation Function Supports UTP CAT.5e Twisted Pair cable					
Push Button	Reset, Load default setting					
Data Process Architecture	Pass through mode					
Jumbo Frame	9K 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				
Far-End Fault (FEF)	Work with LFPT to prevents data loss					



## Industrial Managed PoE Media Converter



Connector and Pin	SFP Slot								
Assignment	RJ-45 Socket: Cat 5e (10/100/1000Mbps) Twisted Pair cable								
	Auto MDI/MDI-X and Auto negotiation Function								
Connector and Pin	RJ-45 Port support IEEE 802.3at/af End-Span, Alternative A mode								
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: Powe	r 1 (Green), Power 2 (Green)	, Fault (Amber)						
	Fiber LNK/ACT (Green): ON: Connected to network, OFF: Not connected to network, BLK: Receive /Transmit data								
	Fiber Speed: Yellow: 1000Base-X, Green: 100Base-X								
	RJ-45 port: Speed: 10 (OFF), 100 (Green), 1000 (Yellow)								
	LNK/ACT for RJ45(Green): ON: Connected to network, OFF: Not connected to network, BLK: Networking is active								
	PoE : On (Green) Flash : PoE Fault (Over-load or short), ON : PoE normal working, OFF : PoE No power output								
Davisias Dalavitus Duata eti su			PoE normal working, OFF : F	OE No power	output				
Reverse Polarity Protection		Power Input							
Overload Current Protection									
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC								
Removable Terminal Block									
Operating Humidity	5%~95% (Non-condensing)								
Operating Temperature	-20°C ~ 75°C								
Storage Temperature	-40°C ~ 85°C								
Housing	Rugged Metal, IP30 Protection and fanless								
Dimensions	106 x 62.5 x 135 mm (D x W x H)								
Weight	650g								
Installation		ing, or wall mounting (Opti							
Power Supply	12/24/48VDC (9.6~57VDC), Redundant power with polarity reverse protect function and removable terminal block								
	Built-in very high efficiency booster(97~99%) to rise up 52VDC for PoE output								
	Regulated PoE output voltage (52VDC) to stabilize PoE device, and guarantee delivery PoE power distance to 100meter								
PoE Power Budget	30W								
Power Consumption	Power consumption &	Total Power Consumption	Davies Davies Canaumantian	Do F Dudget	Doost Efficiency				
	Input Voltage		Device Power Consumption	PoE Budget	Boost Efficiency				
	12VDC	34.2W	3.9W	30W	99.0%				
	24VDC	34.7W	4.4W	30W	99.0%				
	48VDC	35.4W	4.7W	30W	97.7%				
MTBF	864,121 Hours (MIL-HDBK-217)								
Warranty	5 years								
Certifications									
EMC	CE								
EMI	FCC Part 15 Subpart B Class A, CE								

oci tiiitaatioiio				
EMC	CE			
EMI	FCC Part 15 Subpart B Class A, CE			
Railway Traffic	EN50121-4			
Immunity for Heavy Industrial Environment	EN61000-6-2			
Emission for Heavy Industrial Environment	EN61000-6-4			
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			
	EN61000-4-5 (Surge) Level 3, Criteria B			
	EN61000-4-6 (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			



### Industrial Managed PoE Media Converter



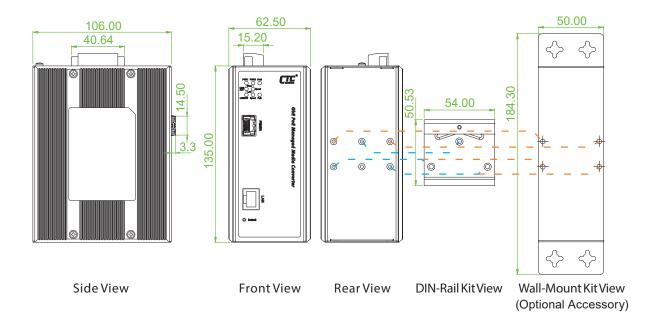
### Software Specifications

Management	Ingress/Egress bandwidth control with 64K granularity
	Web management, Firmware upgrade via Web
	Supports SNMP, MIB for management
	Supports 802.1Q tag VLAN, 16 Tag VLAN group, MIB counters display
Configuation	IP Configuration, Password Setting, Converter Configuration, Port Configuration, VLAN Group Configuration, Alarm Configuration and PoE Configuration
Diagnostic & Monitor	Supports Link Fault Pass-Through (LFPT) Function, Broadcast/Multicast/Unicast Storm Filter, SNMP Alarm Trap for Power Loss and Port Link Up/Down, and PoE Status

#### **In-Band Remote mode**

Management	Supports in-band management from FRM220 Chassis With FRM220-1000MS card		
	Ingress/Egress bandwidth control with 64K granularity		
Configuation	IP Configuration, Converter Configuration, Port Configuration, MIB Counter, VLAN Group Configuration, Alarm Configuration and PoE Configuration		
Diagnostic & Monitor	Remote loop back test		
	Supports Link Fault Pass-Through (LFPT) Function		
	Broadcast/Multicast/Unicast storm filter		
	PoE Status		

### Dimensions



### Ordering Information •

		RJ45	Fiber	PoE		Power Input	С	ertification		0 :
Model Name	Managed	10/100/1000 Base-T	Dual Speed 100/1000Base-X	IEEE802.3af/at (PSE)	Power Budget	Redundant	EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC	Operating Temperature
IMC-1000MS-PHE12	V	1	1 SFP	1	30W	12/24/48VDC	V	V	V	-20~75°C



### Industrial Managed PoE Media Converter



### Optional Accessories

#### ■ Wall Mount Kit

IND-WMK02 Wall Mount kit for Industrial product, 184 x 50mm

#### ■ 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

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

