## **Industrial Fast Ethernet Media Converter**

# **IMC-100C**



## 1x FE RJ45 to 1x 100Base-FX Fiber (ST/SC), Compact Size

- >> Supports LFPT (Link Fault Pass Through) and FEF (Far End Fault)
- >> Provides a DIP-Switch to Set Functions
- > EN50121-4, EN61000-6-2, EN61000-6-4, CE and FCC Certified









The industrial grade compact size unmanaged 100M Ethernet media converter that supports conversion between electrical 10/100Base-TX and optical 100Base-FX Ethernet. Housed in rugged DIN rail or wall mountable enclosures, the converter is designed for harsh environments, such as industrial networking and intelligent transportation systems (ITS) and is also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications. Wide operating temperature range models (-40 to 75°C) fulfill the special needs of industrial automation applications.

### **Features**

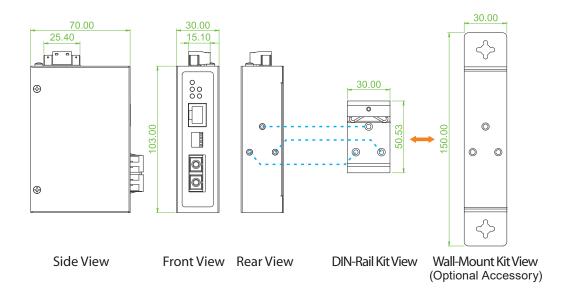
- DC power input 12/24/48VDC (9.6 ~ 60VDC) or 24VAC (18~36VAC)
- IP30 rugged metal housing, compact size and fanless
- Wide operating temperature -40 ~ 75°C
- Store-and-Forward mode and Pass Through mode (set by DIP SW)
- Conversion between 10/100Base-TX and 100Base-FX cable interface

<b>Specifications</b>			
Standard	IEEE 802.3	10Base-T 10Mbit/s Ethernet	
	IEEE 802.3u	100Base-TX, 100Base-FX, Fast Ethernet	
	IEEE 802.3x	Flow Control	
RJ45 Ports	10/100Base-TX Auto MDI/MDI-X and Auto negotiation Supports UTP CAT.5e Twisted Pair cable		
Fiber Ports	100Base-FX (SC/ST connectors)		
Switch Architecture	itecture Store and Forward in switch mode		
	Supports 1024 MAC addre	esses in switch mode	
Ethernet Packet length	2046Byte (Max) in Switch mode		
Jumbo Frame	9K bytes in Pass through (Converter mode)		
Fiber Parameters	Fiber Cable (Multi-mode): 5	50/125um,62.5/125um	
	Fiber Cable (Single-mode): 9/125um		
	Wavelength: 1310nm (Multi-mode/Single-mode)		
	Available distance: 2KM (Multi-mode) / 30k	KM (Single-mode) / 50KM (Single-mode)	
Link Fault Pass Through	TX- Fiber: If TX port link do	own, the media converter will force Fiber port to link down	
(LFPT)	Fiber-TX: If Fiber port link of	down, the media converter will force TX port to link down	
Far-End Fault (FEF)	Work with LFPT to prevent	s data loss	
DIP Switch	Force Fiber port Duplex OFF: Full Duplex / ON: H	Half Duplex	
	LFPT ON: Enables LFPT (Link Fa	ult Pass Through) / OFF: Disables LFPT	
	Architecture OFF: Switching mode /	ON: Pass through converter mode	

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Connector	SC (Multi-mode, 2km), SC (Single-mode, 30km, 50KM)				
	ST (Multi-mode, 2km), ST (Single-mode, 30km, 50KM)				
	RJ-45 Socket CAT.5e (10/100Mbps) Twisted Pair cable				
	Auto MDI/MDI-X and Auto negotiation Function				
LED	PWR (Green):				
LLD	ON: Power active / OFF: Power is inactive				
	Fiber (Green): LNK/Act (Green): Link & Active, Duple (Green): Fiber port Full or Half duplex				
	LAN: 100 (Green): 100M Link & Active / 10 (Green): 10M Link & Active				
Reverse Polarity Protection	Supported for power input	7.0 (0.001). 10.			
Overload Current Protection	Supported				
Power Supply	- ' '	or 24VAC (18~36VAC). i	polarity reverse protect function and removable terminal		
1.1.1	block	- (	,		
Power Consumption	Input Voltage	Watt(W)			
	12VDC	1.8W			
	24VDC	1.8W			
	48VDC	2.1W	_		
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	Provide for 1x DC input power (2 Pin)				
Operating Humidity	5% ~ 95% (Non-condensing)				
Operating Temperature	-40 ~ 75°C				
Storage Temperature	-40 ~ 85°C				
Housing	IP30 rugged metal housing ,c				
Dimensions	70 x 30 x 103mm (D x W x F	1)			
Weight	215g				
Installation	DIN Rail mounting, Wall Mour	• , ,			
MTBF	1,558,180 Hours (MIL-HDBK	-217)			
Warranty	5 years				
Certification					
EMC	CE (EN55032, EN55035)				
	FCC Part 15 Subpart B Class	A, CE			
Railway Traffic	EN50121-4				
Immunity for Heavy Industrial Environment	EN 61000-6-2				
Emission for Heavy Industrial Environment	EN 61000-6-4				
EMS	EN61000-4-2 (ESD) Level 3,	Criteria B			
(Electromagnetic Susceptibility)	EN61000-4-3 (RS) Level 3, (	Criteria A			
Protection Level	EN61000-4-4 (EFT) Level 3,	Criteria A			
	EN61000-4-5 (Surge) Level 3	3, Criteria B			
	EN61000-4-6 (CS) Level 3, (	Criteria A			
	EN61000-4-8 (PFMF) Field s		A		
Shock	IEC 60068-2-27	<del>-</del>			
Freefall	IEC 60068-2-32				
Vibration	IEC 60068-2-6				

## **Dimensions**



# Ordering Information

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Model Name	RJ45		Fiber	Power Input	Certification	Operating
Model Name	10/100/1000Base-T(X)	1000Base-X	Dual Speed 100/1000Base-X	Redundant Power	CE, FCC	Temperature
IMC-1001C-E	1	SC/ST		12/24/48VDC	V	-20~70°C
IMC-1001CS-E	1		1	12/24/48VDC	V	-20~70°C

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

<sup>\*</sup> MOQ is requested for ST type

## **Optional Accessories**

### ■ Wall Mount Kit

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

### ■ Industrial Power Supply

MDR-20-24	Industrial Power, Input 85 ~ 264VAC/120 ~ 370VDC, Output 24VDC, 24W, -20 ~ 70°C
MDR-40-48	Industrial Power, Input 85 ~ 264VAC/120 ~ 370VDC, Output 48VDC, 40W, -20 ~ 70°C