

## 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

### Specifications

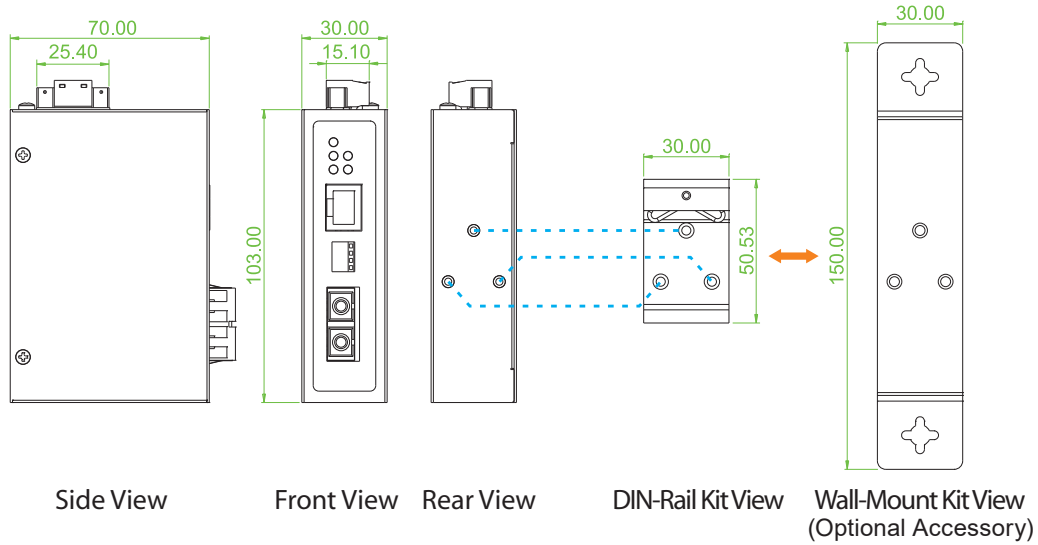
<b>Standard</b>	IEEE 802.3	10Base-T 10Mbit/s Ethernet
	IEEE 802.3u	100Base-TX, 100Base-FX, Fast Ethernet
	IEEE 802.3x	Flow Control
<b>RJ45 Ports</b>	10/100Base-TX Auto MDI/MDI-X and Auto negotiation Supports UTP CAT.5e Twisted Pair cable	
<b>Fiber Ports</b>	100Base-FX (SC/ST connectors)	
<b>Switch Architecture</b>	Store and Forward in switch mode Supports 1024 MAC addresses in switch mode	
<b>Ethernet Packet length</b>	2046Byte (Max) in Switch mode	
<b>Jumbo Frame</b>	9K bytes in Pass through (Converter mode)	
<b>Fiber Parameters</b>	Fiber Cable (Multi-mode): 50/125um,62.5/125um	
	Fiber Cable (Single-mode): 9/125um	
	Wavelength: 1310nm (Multi-mode/Single-mode)	
	Available distance: 2KM (Multi-mode) / 30KM (Single-mode) / 50KM (Single-mode)	
<b>Link Fault Pass Through (LFPT)</b>	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	
<b>Far-End Fault (FEF)</b>	Work with LFPT to prevents data loss	

# Industrial Fast Ethernet Media Converter



<b>DIP Switch</b>	Force Fiber port Duplex OFF: Full Duplex / ON: Half Duplex								
	LFPT ON: Enables LFPT (Link Fault Pass Through) / OFF: Disables LFPT								
	Architecture OFF: Switching mode / ON: Pass through converter mode								
<b>Connector</b>	Fiber 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								
<b>LED</b>	PWR (Green): 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								
<b>Reverse Polarity Protection</b>	Supported for power input								
<b>Overload Current Protection</b>	Supported								
<b>Power Supply</b>	12/24/48VDC (9.6~60VDC) or 24VAC (18~36VAC), polarity reverse protect function and removable terminal block								
<b>Power Consumption</b>	<table border="1"> <thead> <tr> <th>Input Voltage</th> <th>Watt(W)</th> </tr> </thead> <tbody> <tr> <td>12VDC</td> <td>1.8W</td> </tr> <tr> <td>24VDC</td> <td>1.8W</td> </tr> <tr> <td>48VDC</td> <td>2.1W</td> </tr> </tbody> </table>	Input Voltage	Watt(W)	12VDC	1.8W	24VDC	1.8W	48VDC	2.1W
Input Voltage	Watt(W)								
12VDC	1.8W								
24VDC	1.8W								
48VDC	2.1W								
<b>Removable Terminal Block</b>	Provide for 1x DC input power (2 Pin)								
<b>Operating Humidity</b>	5% ~ 95% (Non-condensing)								
<b>Operating Temperature</b>	-40 ~ 75°C								
<b>Storage Temperature</b>	-40 ~ 85°C								
<b>Housing</b>	IP30 rugged metal housing ,compact size and fanless								
<b>Dimensions</b>	70 x 30 x 103mm (D x W x H)								
<b>Weight</b>	215g								
<b>Installation</b>	DIN Rail mounting, Wall Mounting (Optional)								
<b>MTBF</b>	1,558,180 Hours (MIL-HDBK-217)								
<b>Warranty</b>	5 years								
<b>Certification</b>									
<b>EMC</b>	CE (EN55032, EN55035)								
<b>EMI</b>	FCC Part 15 Subpart B Class A, CE								
<b>Railway Traffic</b>	EN50121-4								
<b>Immunity for Heavy Industrial Environment</b>	EN 61000-6-2								
<b>Emission for Heavy Industrial Environment</b>	EN 61000-6-4								
<b>EMS (Electromagnetic Susceptibility) Protection Level</b>	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								
<b>Shock</b>	IEC 60068-2-27								
<b>Freefall</b>	IEC 60068-2-32								
<b>Vibration</b>	IEC 60068-2-6								

## Dimensions



## Ordering Information

Model Name	RJ45	Fiber	Power Input	Certification				Operating Temperature
	10/100Base-TX	100Base-FX	Single Power	EN50121-4	EN61000-6-2 EN61000-6-4	CE	FCC	
IMC-100C-E	1	1 SC	12/24/48VDC	V	V	V	V	-40~75°C

Connector Type	Connectivity Distance
SC, ST	002:2km (M/M)    030:30km (S/M)    050:50km (S/M)
	020A: WDM 20km A type (TX:1310nm)
	020B: WDM 20km B type (TX: 1550nm)

\* MOQ is requested for ST type

## Optional Accessories

### ■ Wall Mount Kit

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