

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

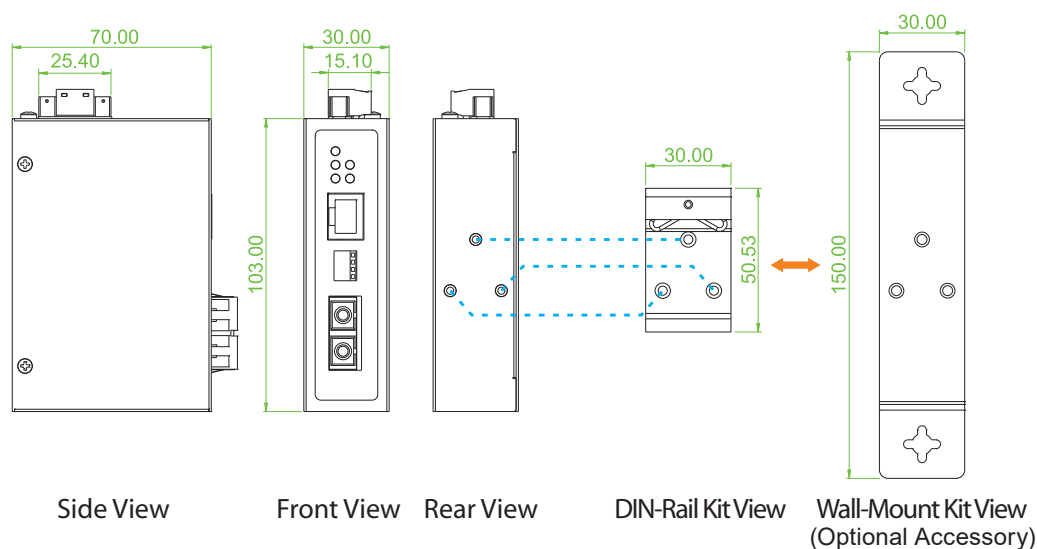
- DC power input 12/24/48VDC (9.6 ~ 60VDC) or 24VAC (18~36VAC)
- IP30 rugged metal housing, compact size and fanless
- Wide operating temperature -40 ~ 75°C
- Store-and-Forward mode and Pass Through mode (set by DIP SW)
- Conversion between 10/100Base-TX and 100Base-FX cable interface

Specifications

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	Store and Forward in switch mode	
	Supports 1024 MAC addresses 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): 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)	
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	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								
Connector	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								
LED	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								
Reverse Polarity Protection	Supported for power input								
Overload Current Protection	Supported								
Power Supply	12/24/48VDC (9.6~60VDC) or 24VAC (18~36VAC), polarity reverse protect function and removable terminal block								
Power Consumption	<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								
Removable Terminal Block	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 ,compact size and fanless								
Dimensions	70 x 30 x 103mm (D x W x H)								
Weight	215g								
Installation	DIN Rail mounting, Wall Mounting (Optional)								
MTBF	1,558,180 Hours (MIL-HDBK-217)								
Certification									
EMC	CE (EN55032, EN55035)								
EMI	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 (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								

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