

iMC4F

Industrial Ethernet to Fiber Ethernet Converter/Two Pairs
IEC 61850 and IEEE 1613 Compliant



Product Overview

iMC4F is a two pairs solution for conversion of 10/100Base-T(x) port to 100Base-X SFP interface. iMC4F supports MDI/MDIX auto detection for 10/100Base-T(X) interface. Far End Fault Indication (FEFI) ensures indication of link status change.

The iMC4F is a reliable media converter that operates at a wide operating temperature range from -40°C to +85°C and accepts a wide voltage range from dual 9-36 VDC power inputs, so it is suitable for harsh operating environments.

Features and Benefits

Table 1. Features

FEATURE	
SUPPORTS	<ul style="list-style-type: none"> • 2 x 10/100Base-T(X) auto-negotiation and auto-MDI/MDI-X ports • 2 x 100Base-X SFP ports • Ethernet to Fiber SFP port • Far End Fault Indication (FEFI) function for 100Base-FX interface • Auto-Negotiation function for 100Base-TX interface • Full/half duplex operation • Store and forward transmission
DUAL INPUT POWER SUPPLIES	
IP-40 GALVANIZED STEEL HOUSING	
DIP-SWITCH FOR SETTING VARIOUS FUNCTIONS (FOR FUTURE IMPLEMENTATION)	
OPERATING TEMPERATURE -40°C TO +85°C	
DIN RAIL AND PANEL MOUNT	

PRODUCT SPECIFICATIONS

Table 2. Technical Specification

DESCRIPTION	SPECIFICATION
10/100BASE-T(X) RJ45 PORT AUTO MDI/MDIX	2
100BASE-FX SFP PORTS	2
TECHNOLOGY	
PROCESSING	Store-and-Forward
PHYSICAL CHARACTERISTICS	
ENCLOSURE	IP-40 Galvanized Steel
DIMENSIONS (W X D X H)	76.20 (W) x 90.20 (D) x 148.35 (H) mm (3.00 x 3.55 x 5.84 inches) DIN Rail mount 114.3 (W) x 82.51 (D) x 203.20 (H) mm (4.50 x 3.25 x 8.0 inches) Panel mount
WEIGHT (G)	~1200 g
POWER	
INPUT POWER	Input 24VDC(Nom), 10-36VDC (Oper), Input 48VDC(Nom), 36-75VDC (Oper), or Input 100-240VDC(Nom), 88-300VDC(Oper) or 100-240VAC(Nom), 85-264VAC(Oper) 50/60Hz
POWER CONSUMPTION (TYP.)	2.2 Watts
OVERLOAD CURRENT PROTECTION	Present
REVERSE POLARITY PROTECTION	Present on terminal block

Features and Benefits

Table 3. Compliance Specification

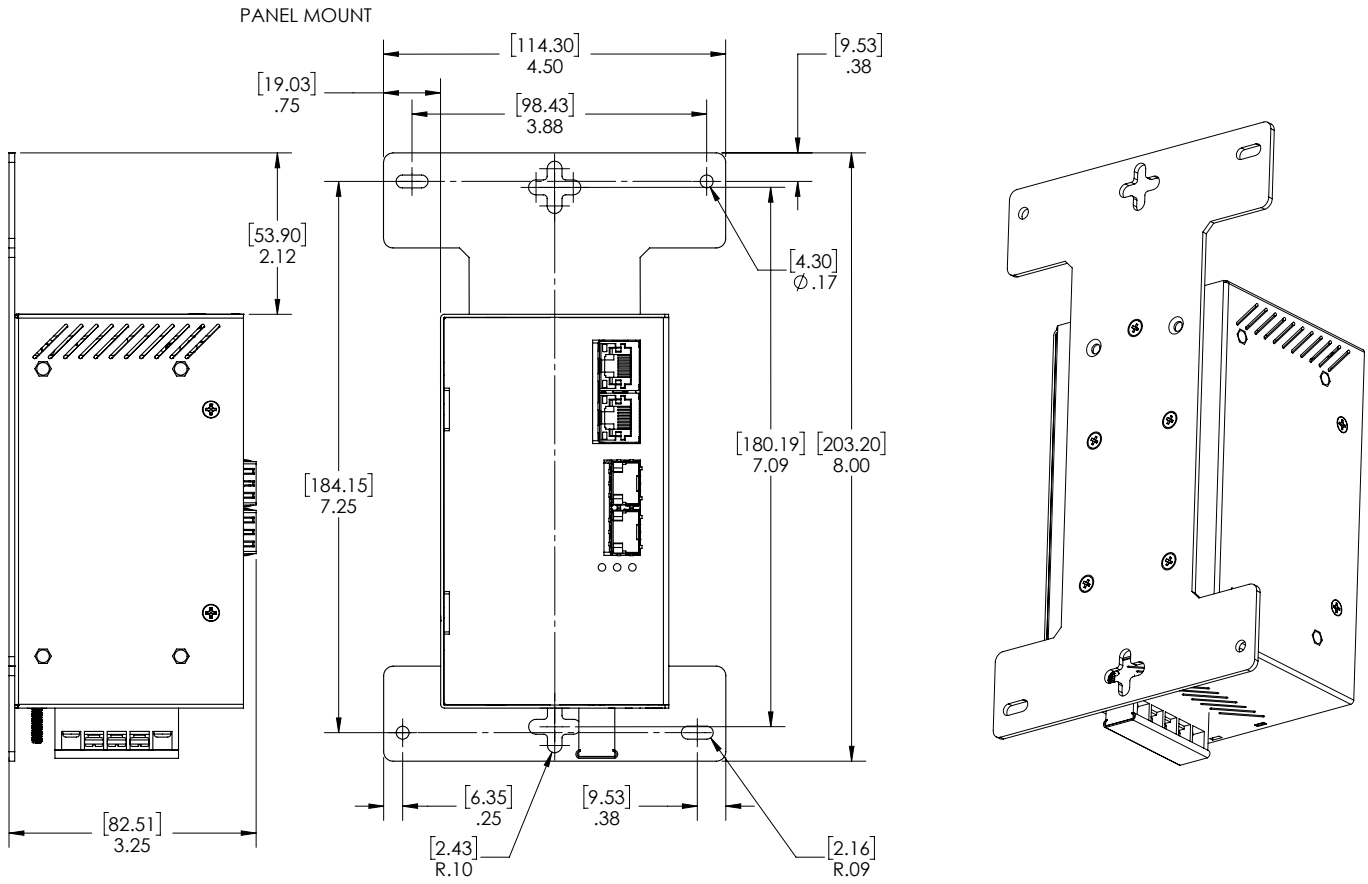
TYPE	STANDARDS
ELECTROMAGNETIC EMISSIONS	FCC Part 15, Class A, CISPR Class A (EN55022)
ELECTROMAGNETIC IMMUNITY	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
SAFETY STANDARDS	EN60950-1
OPERATING ENVIRONMENT	-40°C to +85°C (-40° to 185°F) (no fans) EN 60068-2-21
STORAGE ENVIRONMENT	-40°C to +85°C (-40° to 185°F) EN 60068-2-14
OPERATING HUMIDITY	5% to 95% Non-condensing EN 60068-2-30
SHOCK	IEC60068-2-27
FREE FALL	IEC60068-2-32
VIBRATION	IEC60068-2-32
WARRANTY	5 years, (extendable option with additional terms)

Table 4. Standards and Management

DESCRIPTION	SPECIFICATION
IEEE STANDARDS	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-T(X) and 100Base-FX IEEE 802.3x for Flow control
RFC COMPLIANCE	RFC 4445 MDI RFC 5171UDLD Protocol

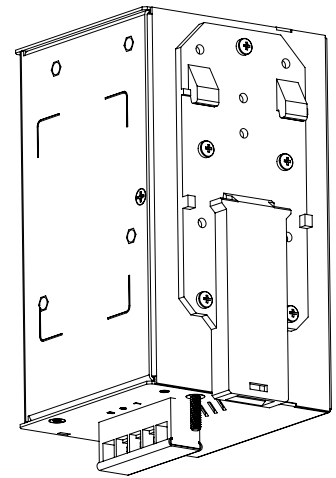
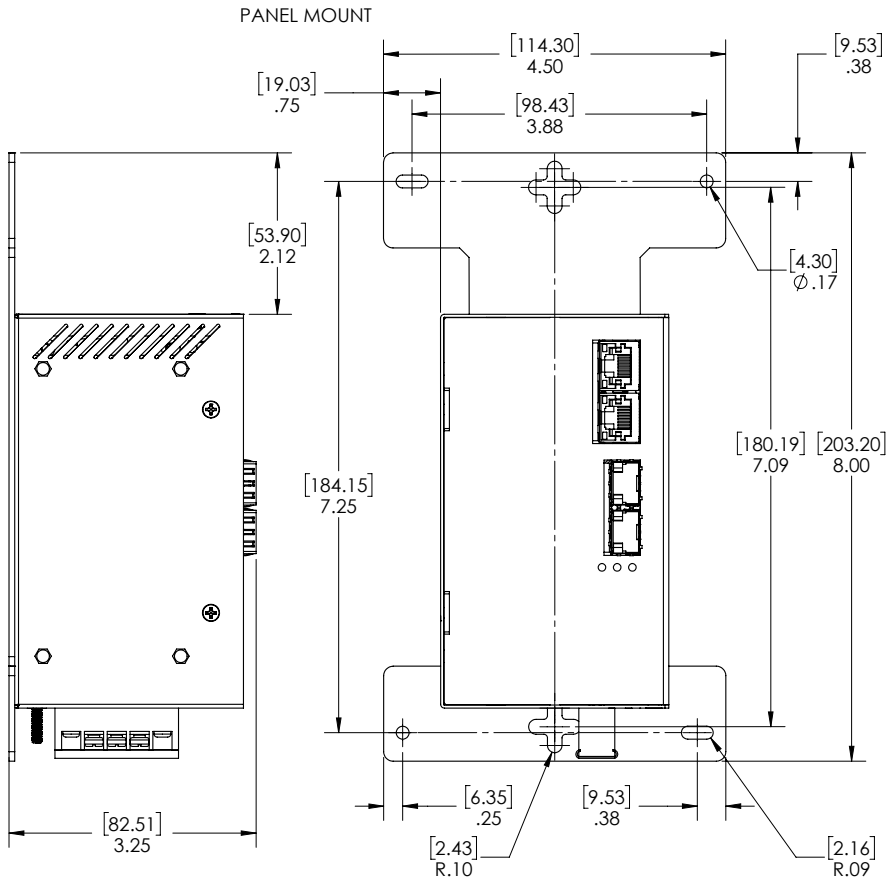
Dimensions

All dimensions are shown in inches [millimeters].



Dimensions

All dimensions are shown in inches [millimeters].



Ordering Information

BASE	POWER SUPPLY	MOUNT	ETHERNET PORT 1&2	ETHERNET PORT 3&4	MOD	DESCRIPTION
iMC4F	HV	D	2RJ45	2SFP		
iMC4F						Core assembly and packaging
	LV					Input 9-36VDC
	MV					Input 36-75VDC
	HV					Input 110-370VDC or 90-264VAC
		D				DIN Rail Mounting
		P				Panel Mounting
		N				No Mounting Hardware
			2RJ45			2 X 10/100Base-T(X) RJ45
				2SFP		2 X 100Base-X SFP (Blank no optical transceivers*)
					C1	Conformal Coating

* See Accessories List for SFP transceiver pricing.

iMC4F Sample Order Code

iMC4F-HV-D-2RJ45-2SFP

Description: Industrial 2 Port 10/100 (TX) to 2 Port 100 (X) Media Convertor, (Power Supply) Input 110-370VDC or 90-264VAC, DIN Rail Mounting, (Ethernet Port 1&2) 2 X 10/100Base-T(X) RJ45, (Ethernet Port 3&4) 2 X 100Base-X SFP.

The same unit, may be ordered with conformal coating by appending '-C1' to the order code, for example: iMC4F-HV-D-2RJ45-2SFP-C1

Description: Industrial 2 Port 10/100 (TX) to 2 Port 100 (X) Media Convertor, (Power Supply) Input 110-370VDC or 90-264VAC, DIN Rail Mounting, (Ethernet Port 1&2) 2 X 10/100Base-T(X) RJ45, (Ethernet Port 3&4) 2 X 100Base-X SFP. This system will be conformal coated.



SERVICES • SUPPORT • SECURITY • SOLUTIONS • SYSTEMS

For more information, visit is5com.com

General Inquiries: toll free: +1 844-520-0588 | info@is5com.com

Technical support: +1 844-475-8324 (+1 844-iS5-TECH) | support@is5com.com

Address: 5895 Ambler Drive, Mississauga, Ontario, L4W 5B7, Canada