

iMC2



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Intelligent 2 Port Ethernet to Fiber Converter

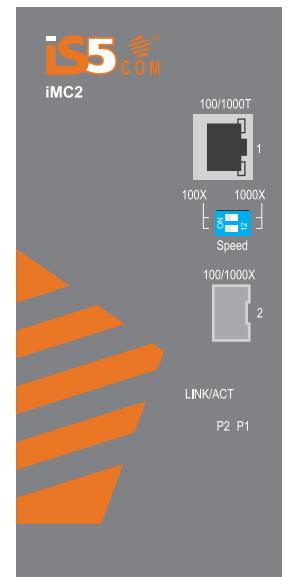
Features

- ➔ Supports 1 port 10/100Base-T(X) auto-negotiation and auto-MDI/MDI-X
- ➔ Supports Ethernet to fiber or Ethernet to SFP port
- ➔ Supports LFP (Link Fault Pass-through) function
- ➔ Supports full/half duplex operation
- ➔ Supports store and forward transmission
- ➔ DIP-Switch to set various function
- ➔ Rigid - IP-40 Galvanized Steel -40 to +85 degrees C
- ➔ DIN-Rail and wall mount

Introduction

iMC2 is an industrial grade media converter for conversion of 10/100Base-T(X) to 100Base-FX. iMC2 supports MDI/MDIX auto detection. The iMC2 is a reliable media converter that will operate in the harshest environments.

iMC2 also supports the LFP (Link Fault Pass-through) feature. The DIP-Switch enables the LFP function, enabling the iMC2 to force a link to shutdown immediately when the other link fails, giving the application software a chance to react to the situation.



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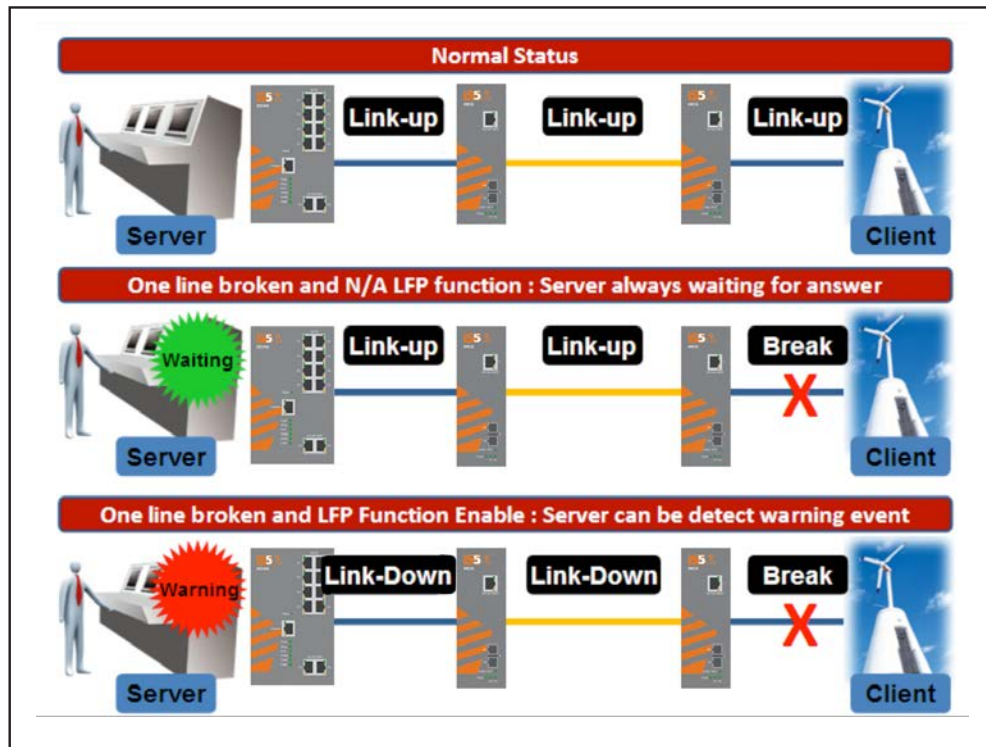
Tel: +905-670-0004

Fax: +289-401-5206

Email: info@i5com.com



#3-7490 Pacific Circle, Mississauga, Ontario, L5T 2A3



Connections of Media Converter with LFP function

Specifications

Model Number		iMC2-MM	iMC2-SS	iMC2-SFP
Physical Ports				
10/100 Base-T(X) Port in RJ45 Auto MDI/MDIX		1	1	1
Fiber Port Specification	Fiber Ports Number	1	1	-
	Fiber Ports Standard	100Base-FX	100Base-FX	
	Fiber Mode	Multi-mode	Single-mode	
	Fiber Diameter (μm)	62.5/125 μm 50/125 μm	9/125 μm	
	Fiber Optical Connector	SC	SC	
	Typical Distance (Km)	2 Km	30 Km	
	Wavelength (nm)	1310 nm	1310 nm	
	Max. Output Optical Power (dbm)	-14 dbm	-8 dbm	
	Min. Output Optical Power (dbm)	-23.5 dbm	-15 dbm	
	Max. Input Optical Power (Saturation)	0 dbm	0 dbm	
	Min. Input Optical Power (Sensitivity)	-31 dbm	-34 dbm	
Link Budget (db)	7.5 db	19 db		
100Base-FX SFP port		-	-	1

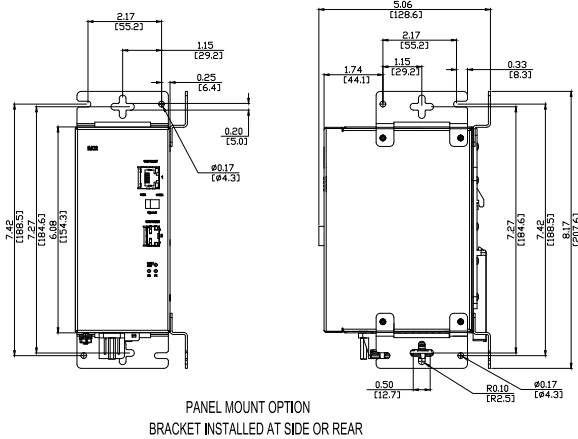
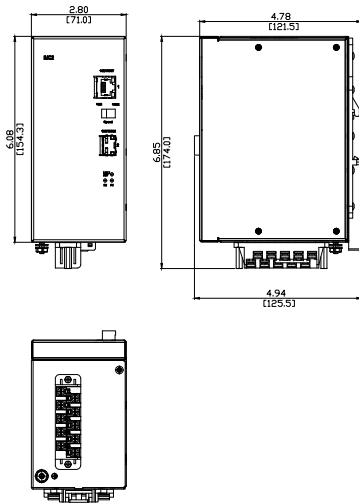


Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X) and 100Base-FX, IEEE 802.3x for Flow control
Processing	Store-and-Forward
DIP-Switch setting	DIP-Switch 1 for LFP mode selection : (ON) enable / (OFF) disable DIP-Switch 2 for Ethernet speed selection : (ON)10Mbps / (OFF) 10/100Mbps Auto-negotiate DIP-Switch 3 for Ethernet full/half duplex selection : (ON) Half-duplex / (OFF) Full/Half-Duplex Auto-negotiate DIP-Switch 4 for fiber full/half duplex selection : (ON) Half-Duplex / (OFF) Full-Duplex
LED indicators	
Power indicator	Green : Power LED x 2 (ON : power input on-line / (OFF) power input off-line
10/100Base-T(X) RJ45 port indicator	Green for port Link/Act – (ON) Link up / (Blinking) Acting / (OFF) Link down Amber for 100Mbps/10Mbps indicator – (ON) Working at 100Mbps / (OFF) Working at 10Mbps Green for port duplex indicator – (ON) Full-Duplex / (OFF) Half-Duplex
100Base-FX fiber port indicator	Green for fiber port Link/Act - (ON) Link up / (Flash) Acting / (OFF) Link down Green for fiber port duplex indicator – (ON) Full-Duplex / (OFF) Half-Duplex
LFP statue indicator	Amber LED – (ON) LFP function fail / (OFF) LFP function disable
Power	
Input power	Dual DC inputs 10 to 48VDC, Dual DC Inputs 36-72VDC, or Single input universal supply 120-370VDC or 85-264VAC with a single 10-48VDC Backup.
Power consumption (Typ.)	2.2 Watts
Overload current protection	Present
Reverse polarity protection	Present on terminal block
Physical Characteristic	
Enclosure	IP-40 Galvanized Steel
Dimension (W x D x H)	26.1 (W) x 70 (D) x 95 (H)mm (1.03 x 2.76 x 3.74 inch)
Weight (g)	218 g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 85°C (-40 to 185°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory approvals	
EMI	FCC Part 15, CISPR (EN55022) class A, EN50155 (EN50121-3-2, EN55011, EN50121-4)
EMS	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
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
Warranty	
Warranty	5 Years



Dimensions

All Dimensions are in Inches



Ordering Information

Base	Power Supply	Mount	Ethernet Port 1	Ethernet Port 2	Description
iMC2	LV	D	1GRJ45	1GSSC10	
iMC2					Core assembly and packaging
	LV				24VDC (18-36VDC)
	MV				48 VDC (36-72VDC)
	HV				88-300VDC or 85-264VAC
		D			DIN Rail Mounting
		P			Panel Mounting
		N			No Mounting Hardware
			1GRJ45		10/100/1000Base TX RJ45
				1GMSC05	1000LX Multimode SC, 850nm, 500m
				1GMST05	1000LX Multimode ST, 850nm, 500m
				1GSSC10	1000LX Singlemode SC, 1310nm,10km
				1GSST10	1000LX Singlemode ST, 1310nm, 10km
				1GSSC25	1000LX Singlemode SC, 1310nm, 25km
				1GSST25	1000LX Singlemode SC, 1310nm, 25km
				1SFP**	1000SX SFP (Blank no optical transceiver)

Example order code: iMC2-LV-D-1GRJ45-1GSSC10-C1
 Description: Media Converter, Power Supply: Dual Input (10-48VDC), DIN Rail Mount, 1x10/100/1000base-T(X) port, 1x1000 Singlemode SC, 10Km port, Conformal Coating
 C1=Add for conformal coating



**SFP's to be ordered separately.

SFP Module #	Description
SFP100-MM-2	SFP 100Mbps Multimode LC Transceiver 2km, 1310nm, -40C - +85C
SFP100-SM-30	SFP 100Mbps Singlemode LC Transceiver 30km, 1310nm, -40C - +85C
SFP100-SM-60	SFP 100Mbps Singlemode LC Transceiver 60km, 1310nm, -40C - +85C
SFP100-SM-100	SFP 100Mbps Singlemode LC Transceiver 100km, 1550nm, -40C - +85C
SFP100-SM-120	SFP 100Mbps Singlemode LC Transceiver 120km, 1550nm, -40C - +85C
SFP100BIDI1-SM-20	SFP 100Mbps Bi-Directional Singlemode LC Transceiver 20km, TX1310 nm, RX1550nm, -40C - +85C
SFP100BIDI2-SM-20	SFP 100Mbps Bi-Directional Singlemode LC Transceiver 20km, TX1550 nm, RX1310nm, -40C - +85C
SFP100BIDI1-SM-40	SFP 100Mbps Bi-Directional Singlemode LC Transceiver 40km, TX1310 nm, RX1550nm, -40C - +85C
SFP100BIDI2-SM-40	SFP 100Mbps Bi-Directional Singlemode LC Transceiver 40km, TX1550 nm, RX1310nm, -40C - +85C
SFP100BIDI1-SM-60	SFP 100Mbps Bi-Directional Singlemode LC Transceiver 60km, TX1310 nm, RX1550nm, -40C - +85C
SFP100BIDI2-SM-60	SFP 100Mbps Bi-Directional Singlemode LC Transceiver 60km, TX1550 nm, RX1310nm, -40C - +85C
SFP1000-MM-550	SFP 1Gbps Multimode LC Transceiver 500m, 850nm, -20C - +85C
SFP1000-MM-2	SFP 1Gbps Multimode LC Transceiver 2km, 1310nm, -40C - +85C
SFP1000-SM-10	SFP 1Gbps Singlemode LC Transceiver 10km, 1310nm, -40C - +85C
SFP1000-SM-20	SFP 1Gbps Singlemode LC Transceiver 20km, 1310nm, -40C - +85C
SFP1000-SM-30	SFP 1Gbps Singlemode LC Transceiver 30km, 1310nm, -40C - +85C
SFP1000-SM-40	SFP 1Gbps Singlemode LC Transceiver 40km, 1310nm, -40C - +85C
SFP1000-SM-50	SFP 1Gbps Singlemode LC Transceiver 50km, 1550nm, -40C - +85C
SFP1000-SM-70	SFP 1Gbps Singlemode LC Transceiver 70km, 1550nm, -40C - +85C
SFP1000-SM-8-	SFP 1Gbps Singlemode LC Transceiver 80km, 1550nm, -40C - +85C
SFP1000BIDI1-SM-10	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 10km, TX1310 nm, RX1550nm, -40C - +85C
SFP1000BIDI2-SM-10	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 10km, TX1550 nm, RX1310nm, -40C - +85C
SFP1000BIDI1-SM-20	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 20km, TX1310 nm, RX1550nm, -40C - +85C
SFP1000BIDI2-SM-20	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 20km, TX1550 nm, RX1310nm, -40C - +85C
SFP1000BIDI1-SM-40	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 40km, TX1310 nm, RX1550nm, -40C - +85C
SFP1000BIDI2-SM-40	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 40km, TX1550 nm, RX1310nm, -40C - +85C
SFP1000BIDI1-SM-60	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 60km, TX1310 nm, RX1550nm, -40C - +85C
SFP1000BIDI2-SM-60	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 60km, TX1550 nm, RX1310nm, -40C - +85C
SFP1000BIDI1-SM-80	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 80km, TX1310 nm, RX1550nm, -40C - +85C
SFP1000BIDI2-SM-80	SFP 1Gbps Bi-Directional Singlemode LC Transceiver 80km, TX1550 nm, RX1310nm, -40C - +85C