



# Quick Installation Guide

# IMC/IGMC Series

# Industrial Media Converter

## Introduction

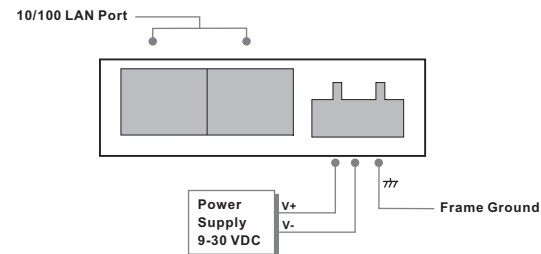
IMC / IGMC Series are industrial media converters provide media conversion between 10/100/1000Base-T(X) and 100FX/1000Base-X fiber optical interface. IMC / IGMC series is rigid IP-30 housing design and supporting an operating temperature of -10 to 60°C. Therefore, IMC / IGMC Series is reliable media converter for industrial application.

## Features

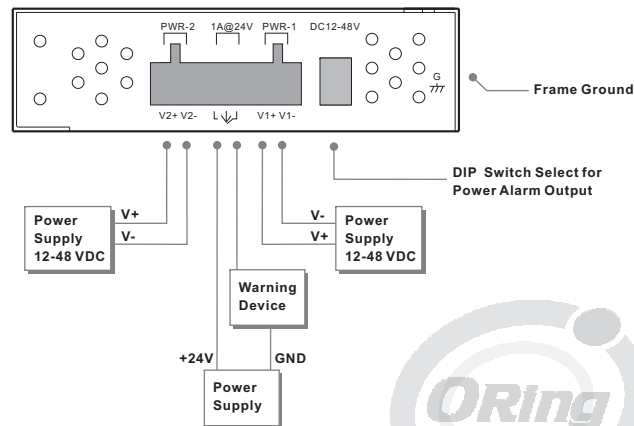
- > IMC Series supports 1 port 100FX multi-mode / single-mode
- > IGMC Series supports 1 port 1000Base-X multi-mode / single-mode or SFP port
- > IGMC series provide relay output to carry capacity of 1A at 24VDC for power alarm output
- > Wide operating temperature range from -10 °C to 60 °C (Extended temperature model from -40 to 70°C, -40 to 158°F)
- > Rigid IP-30 housing design
- > DIN-Rail and panel mounting enabled

## Power Connection Guide

### 100BaseFX Media Converter (IMC)



### Gigabit Media Converter (IGMC)



#### DIP Switch Function

DIP-Switch	Description
1,2 OFF	Relay Function Disable
1 ON	PWR-1 failure, Relay Enable
2 ON	PWR-2 failure, Relay Enable

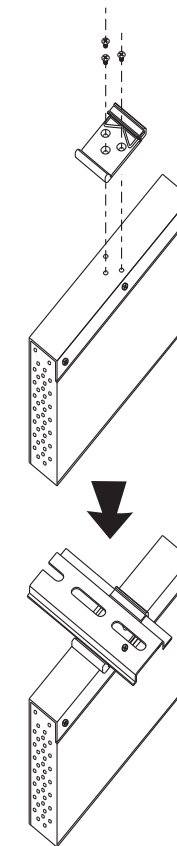
## Specifications

ORing Media Converter Model	IMC-1021FX-MM	IMC-1021FX-SS	IGMC-1011GF-MM	IGMC-1011GF-SS	IGMC-1011GP
<b>Physical Ports</b>					
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	2	2	-	-	-
10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX	-	-	1	1	1
100Base-F(X) Multi-mode Port (2KM,1310nm,SC connector)	1	-	-	-	-
100Base-F(X) Single-mode Port (30KM,1310nm,SC connector)	-	1	-	-	-
1000Base-SX Multi-mode Port (550M,850nm,SC connector)	-	-	1	-	-
1000Base-LX Single-mode Port (10KM,1310nm,SC connector)	-	-	-	1	-
1000Base-X SFP Port	-	-	-	-	1
<b>Technology</b>					
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X) and 100Base-FX		IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X), IEEE 802.3ab for 1000Base-T, IEEE 802.3z for 1000Base-X		
<b>LED indicators</b>					
Power / Ready Indicator	Green: Power LED x2				
10/100TX RJ45 Port Indicator	Green for port Link/Act. Yellow for duplex.				
Fault Indicator	-				
10/100/1000TX RJ45 Port Indicator	-				
1000X Port Indicator	-				
<b>Fault contact</b>					
Relay	-				
Dip switch	-				
<b>Power</b>					
Input power	9~30 VDC power input in 3-pin terminal block		Dual 12~48 VDC power inputs in 6-pin terminal block		
Power consumption(Typ.)	4.5 Watts		3.5 Watts		
Reverse polarity protection	Present		Present		
Overload current protection	Present		Present		
<b>Physical Characteristic</b>					
Enclosure	IP-30		IP-30		
Dimension (W x D x H)	64 mm(W) x 102 mm(D) x 25 mm(H)		26.1 mm(W) x 95 mm(D) x 144.3 mm(H)		
Weight (g)	300 g	300 g	400 g	400 g	380 g
<b>Environmental</b>					
Storage Temperature	-40 to 85°C (-40 to 185°F)				
Operating Temperature	-10 to 60°C (14 to 140°F) Extended temperature model (-40 to 70°C, -40 to 158°F, -T model)		-40 to 70°C (-40 to 158°F)		
Operating Humidity	5% to 95% Non-condensing				
<b>Regulatory approvals</b>					
EMI	FCC Part 15, CISPR (EN55022) class A				
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				
Vibration	IEC60068-2-6				
Free Fall	IEC60068-2-32				
Safety	EN60950-1				
<b>Warranty</b>	5 years				

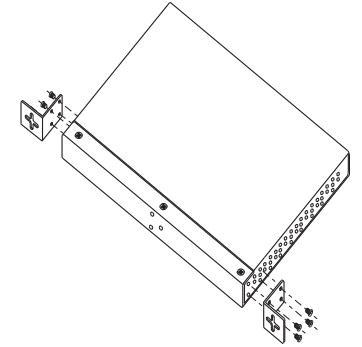
## Installation

### Gigabit Media Converter (IGMC)

#### DIN-Rail Install Step

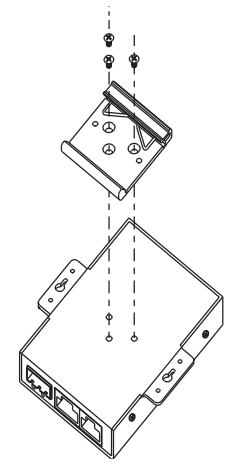


#### Wall-mounted Install Step



### 100BaseFX Media Converter (IMC)

#### DIN-Rail Install Step



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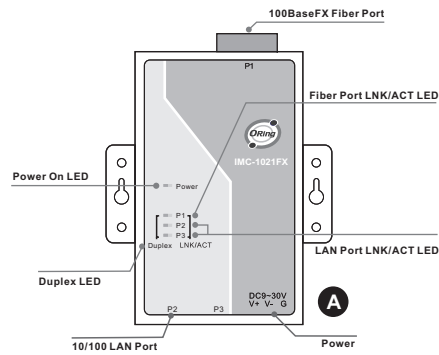
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## IMC/IGMC Series

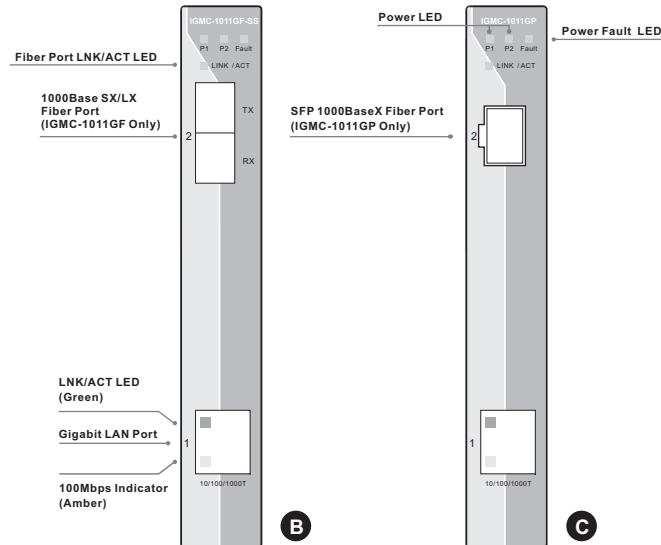
## Industrial Media Converter

### Front Panel

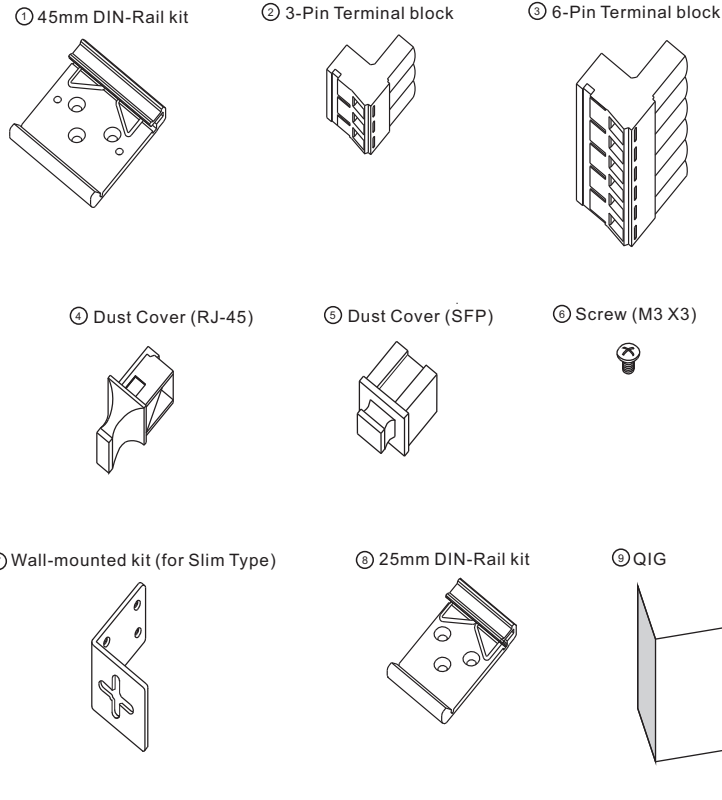
#### 100BaseFX Media Converter (IMC)



#### Gigabit Media Converter (IGMC)



### Accessory



### Packing list

#### IMC-1000 Series

Model name	Front Panel	Model Description	Accessory
IMC-1021FX-MM-SC	A	Industrial media converter with 2x10/100T(X) and 1x100BaseFX (Multi-mode, Wavelength = 1310nm, 2KM)	① X 1, ② X 1, ③ X 2, ④ X 1
IMC-1021FX-MMSX-SC	A	Industrial media converter with 2x10/100T(X) and 1x100BaseFX (Multi-mode, Wavelength = 850nm, 2KM)	① X 1, ② X 1, ③ X 2, ④ X 1
IMC-1021FX-SS-SC	A	Industrial media converter with 2x10/100T(X) and 1x100BaseFX (Single-mode)	① X 1, ② X 1, ③ X 2, ④ X 1

#### IGMC-1000 Series

Model name	Front Panel	Model Description	Accessory
IGMC-1011GF-MM-SC	B	Industrial Gigabit media converter with 1x 10/100/1000 T and 1x1000 SX (Multi-mode)	① X 1, ② X 1, ③ X 8, ④ X 2, ⑤ X 1, ⑥ X 1
IGMC-1011GF-SS-SC	B	Industrial Gigabit media converter with 1x 10/100/1000 T and 1x1000 LX (Single-mode)	① X 1, ② X 1, ③ X 8, ④ X 2, ⑤ X 1, ⑥ X 1
IGMC-1011GP-SC	C	Industrial Gigabit media converter with 1x 10/100/1000 T and 1x1000 SFP	① X 1, ② X 1, ③ X 1, ④ X 8, ⑤ X 2, ⑥ X 1, ⑦ X 1

### Communication Connections

#### 10/100BaseT(X) Ethernet Port Connection

##### RJ45 (8-pin, MDI) Port Pinouts

Pin	Single
1	Tx+
2	Tx-
3	Rx+
6	Rx-

##### RJ45 (8-pin, MDI-X) Port Pinouts

Pin	Single
1	Rx+
2	Rx-
3	Tx+
6	Tx-

#### 1000BaseT Ethernet Port Connection

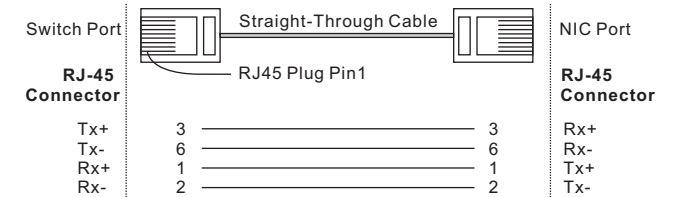
##### RJ45 (8-pin, MDI) Port Pinouts

Pin	MDI
1	BI_DA+
2	BI_DA-
3	BI_DB+
4	BI_DB-
5	BI_DC+
6	BI_DC-
7	BI_DD+
8	BI_DD-

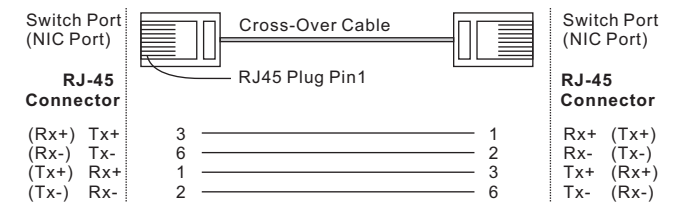
##### RJ45 (8-pin, MDI-X) Port Pinouts

Pin	MDI-X
1	BI_DB+
2	BI_DB-
3	BI_DA+
4	BI_DD+
5	BI_DD-
6	BI_DA-
7	BI_DC+
8	BI_DC-

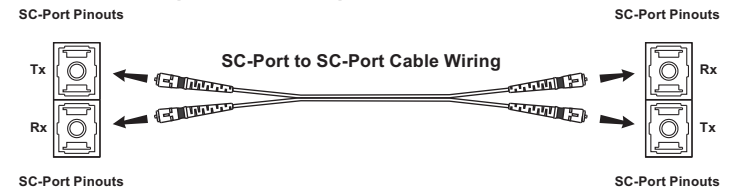
#### RJ45 (8-pin) to RJ45 (8-Pin) Straight-Through Cable Wiring



#### RJ45 (8-pin) to RJ45 (8-Pin) Cross-Over Cable Wiring



#### 100BaseFX/ 1000BaseSX/ LX Port Connection



#### 1000Base-X SFP Port Connection

