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Make network communication more reliable

IMC101B Series
Industrial Media Converter
Quick Installation Guide

Industrial Ethernet Switch

Device Networking Product

3onedata

Embedded Module

Industrial Wireless Product
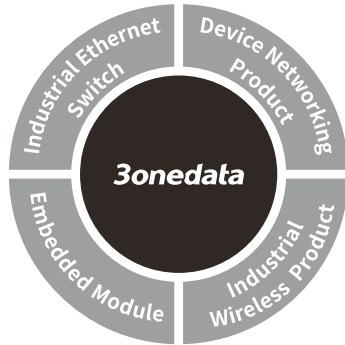
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【Package Checklist】

Please check whether the package and accessories are intact while using the media converter for the first time.

1 Industrial Media Converter
2 Quick installation guide
3 DIN-Rail mounting attachment
4 AC power line (only for AC device)
5 Certification
6 Warranty card

If any of these items are damaged or lost, please contact our company or dealers, we will solve it asap.

【Product Overview】

This series are industrial media converters. For convenience, the products of this series adopt the following number on the left in this guide, please affirm the number of your product.

Model I. IMC101B-1F-P48 (1 100M copper port + 1 100M fiber port, 1 9~48VDC power supply)
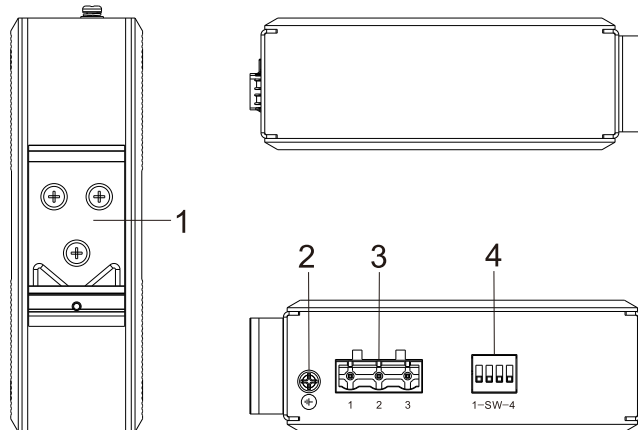
Model II. IMC101B-1F-P220 (1 100M copper port + 1 100M fiber port, 1 100~240VAC/DC power supply)

Model III. IMC101B-1S-P48 (1 100M copper port + 1 100M SFP slot, 1 9~48VDC power supply)
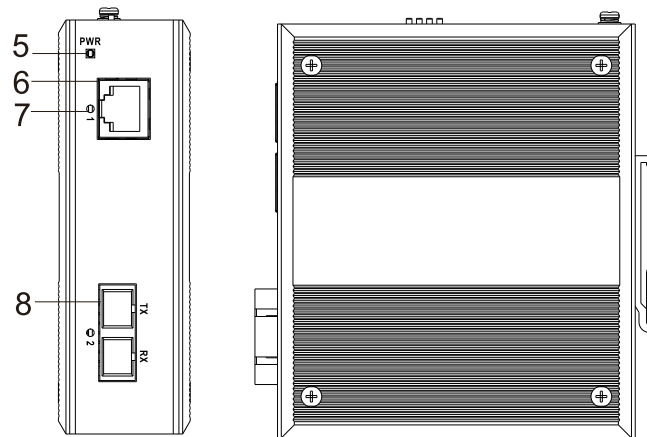
Model IV. IMC101B-1S-P220 (1 100M copper port + 1 100M SFP slot, 1 100~240VAC/DC power supply)
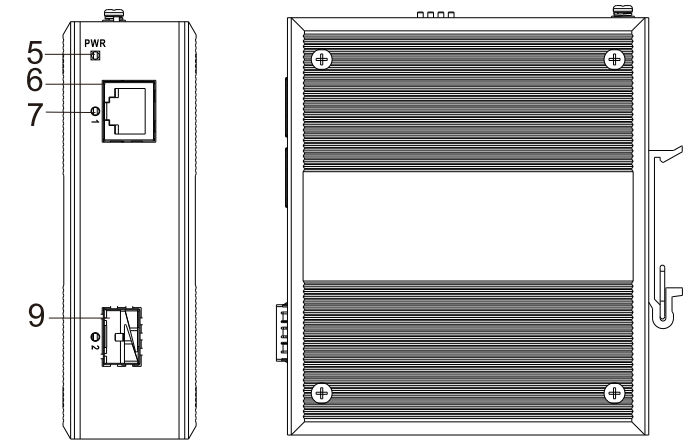
【Panel Design】

➢ **Rear view, Bottom view and Top view**

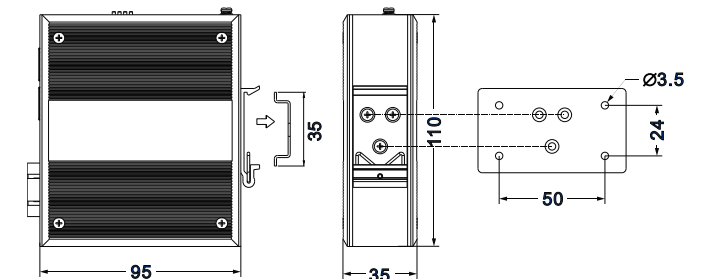➢ **Front view and Side view**

Model I, Model II

Model III, Model IV

1. DIN-Rail mounting kit
2. Grounding screw
3. Terminal block for power input
4. DIP switch
5. Power input status indicator
6. 10/100Base-T(X) 100M copper port
7. Ethernet port Link indicator
8. 100Base-FX 100M fiber port
9. 100Base-FX 100M SFP slot

【Mounting Dimension】

Unit: mm

⚠ **Note before mounting:**

- Don't place or install the device in area near water or moist, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before power on, first confirm the supported power

supply specification to avoid over-voltage damaging the device.

- The device surface temperature is high after running; please don't directly contact to avoid scalding.

【DIN-Rail Mounting】

The product adopts 35mm standard DIN-Rail mounting which is suitable for most industrial scenes, mounting steps as follows:
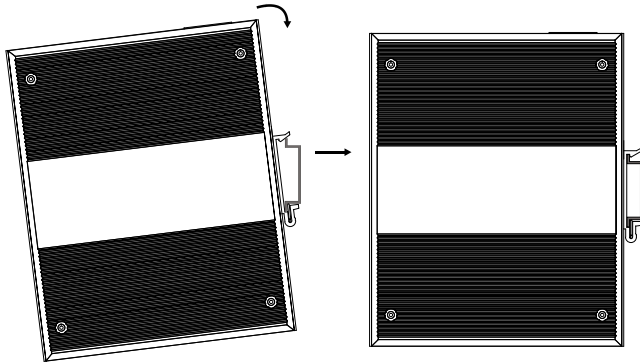
Step 1 Check if the DIN-Rail mounting kit is installed firmly.

Step 2 Insert the bottom of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, and then insert the top into DIN-Rail.

Tips:

Insert a little to the bottom, lift upward and then insert to the top.

Step 3 Check and confirm the products is firmly installed on DIN-Rail, then mounting ends.

【Disassembling DIN-Rail】

Step 1 Device power off.

Step 2 After lift the device upward slightly, first shift out the top of DIN-Rail mounting kit, and then shift out the bottom of DIN-Rail, disassembling ends.

Note before powering on:

- Power ON operation: First insert the power supply terminal block into the device power supply interface,

and then plug the power supply plug contact and power on.

- Power OFF operation: First, remove the power plug, and then remove the wiring section of terminal block. Please pay attention to the above operation sequence.
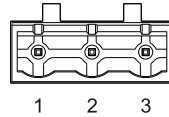
【Power Supply Connection】

➢ **DC power supply**
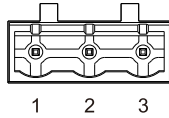
Model I and Model III provide 3-pin 7.62mm pitch terminal block for 1 DC power input. This power supply supports anti-reverse connection Power supply range: 9 ～ 48VDC. The pin definitions of power supply are shown as follows:

Pin No.	1	2	3
Definition	V+	FG	V-

➢ **AC power supply**

Model II and Model IV provide 3 7.62mm pitch terminal block for 1 power input. Power supply range: 100~240VAC/DC. The pin definitions of power supply are shown as follows:

Pin No.	1	2	3
Definition	N/-	GND	L/+

【DIP Switch Settings】

Provide 4-bits DIP switch for function setting, where "ON" is enable valid terminal. DIP switches definition as follows:

DIP	Definition	Operation
1	Jumbo frame	Set the DIP to ON to enable jumbo frame function
2	Broadcast storm suppression	Set the DIP to ON to enable broadcast storm suppression function
3	LFP	Set the DIP to ON to enable LFP function, when one end of the

DIP	Definition	Operation
		copper port or fiber port disconnects, close another port; when the port is reconnected, open another port.
4	Flow control	Set the DIP to ON to enable flow control function

【Checking LED Indicator】

The device provides LED indicators to monitor the device working status with a comprehensive simplified troubleshooting; the function of each LED is described in the table as below:

LED	Indicate	Description
PWR	ON	PWR is connected normally
	OFF	PWR is disconnected or running abnormally
Link/Act (1-2)	ON	Ethernet port is connected
	Blinking	The Ethernet interface is in a network activity state.
	OFF	Ethernet port is is connected abnormally or disconnected

【Specification】

Panel	
100M Copper Port	10/100Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotunning
100M fiber port	100Base-FX, optional SC/ST/FC
100M SFP	100Base-FX SFP slot
Indicator	Power supply indicator, interface indicator
Switch Property	
Backplane bandwidth	1G
MAC Address Table	2K
Power supply	

Model I, Model III	9~48VDC, anti-reverse connection
Model II, Model IV	100~240VAC/DC
Access terminal block	3-pin 7.62mm pitch terminal blocks
Power consumption	
Model I, Model III	No-load: 1.0W@24VDC Full-load: 1.6W@24VDC
Working environment	
Working temperature	-40～75℃
Storage temperature	-40～85℃
Working humidity	5%～95% (no condensation)
Protection grade	IP40 (metal shell)