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Make network communication more reliable

NP5200 Series Serial Server Quick Installation Guide

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【Package Checklist】

Please check whether the package and accessories are intact while using the series serial device server for the first time.

1. Serial Device Server
2. Straight-through cable
3. DIN-Rail mounting kit
4. Certificate
5. Warranty card

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

【Product Overview】

The products are managed DIN-Rail safe serial servers, including the following models:

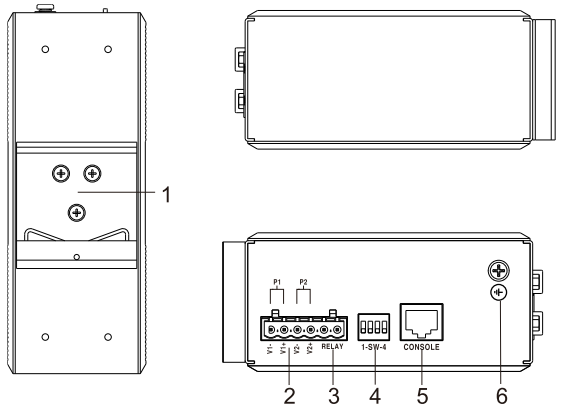
Model I. NP5200-2T-4DI(3INI)-DB (2 100M copper ports + 4 3IN1 serial ports with isolation + 2 12~48VDC power supplies)

Model II. NP5200-2T-2DI(3IN1)-DB (2 100M copper ports + 2 3IN1 serial port with isolation + 2 12~48VDC power supplies)

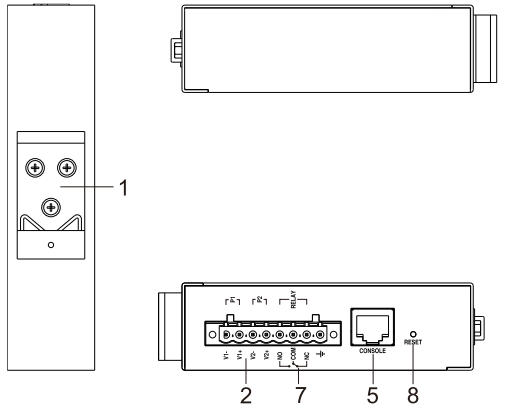
Model III. NP5200-2T-1DI(3IN1)-DB (2 100M copper ports + 1 3IN1 serial port with isolation + 2 12~48VDC power supplies)

【Panel Design】

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

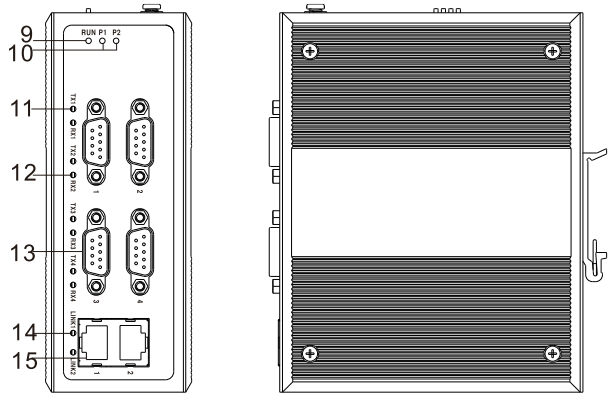


Model I

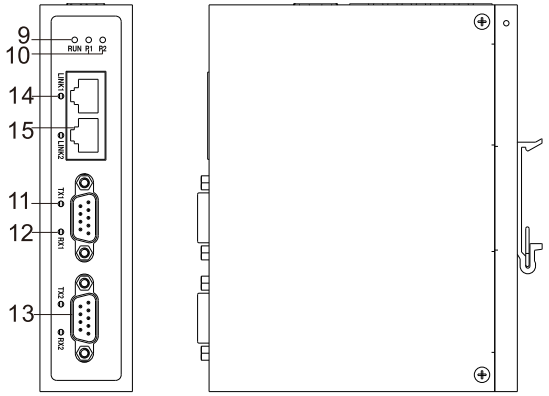


Model II, Model III

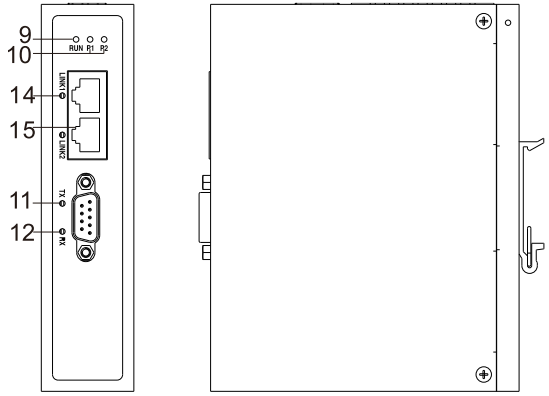
➢ **Front view and Side view**



Model I



Model II



Model III

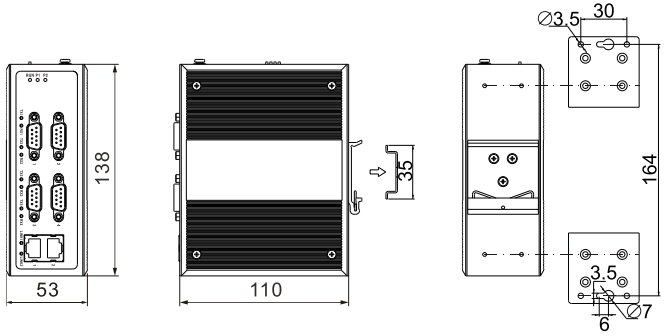
1. DIN-Rail mounting kit
2. Terminal blocks for power input
3. Terminal blocks for relay output 1(Reserved)
4. DIP switch
5. Console port
6. Grounding screw (Protective grounding)
7. Terminal blocks for relay input 2(Reserved)
8. Reset button
9. Running indicator RUN
10. Power supply indicator P1/P2
11. Serial port transmitting indicator TX
12. Serial port receiving indicator RX
13. RS-232/485/422 3IN1 serial port
14. Copper port status indicator
15. 100M copper port

【Dimension】

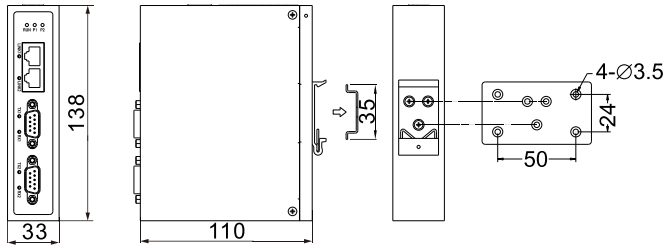
Unit (mm)

Note:

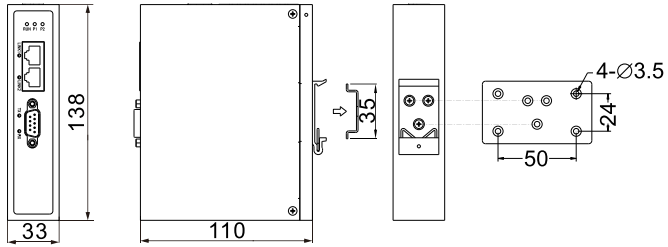
The standard mounting accessory of the device is DIN-Rail mounting kit. The mounting panel on the right side of the drawing below is not standard. It can be purchased separately if necessary.



Model I



Model II



Model III

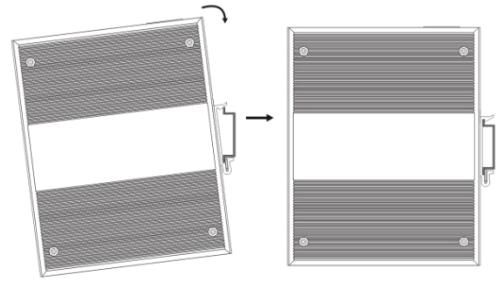
Notice Before Mounting:

- 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】

➢ **Install the device**

The product adopts 35mm standard DIN-Rail mounting, which is suitable for most of the industrial scenes. Mounting steps are as below:



Step 1 Check whether the DIN-Rail mounting kit that comes with the device is installed firmly.

Step 2 Insert the bottom of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, 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 product is firmly installed on DIN-Rail, then mounting ends.

➢ **Disassemble the device**

Step 1 Power off device.

Step 2 After lifting 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.

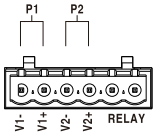
Notice before power on:

- Power ON operation: First insert the power supply terminal block into the device power supply interface, then plug the power supply plug contact and power on.
- Power OFF operation: First, remove the power plug, then remove the wiring section of terminal block. Please pay attention to the above operation sequence.

【Power Supply Connection】

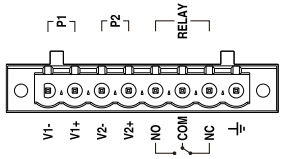
➢ **Model I**

The Model I of the series provides 6-pin 5.08mm pitch power supply terminal blocks and power supply occupies the left 4



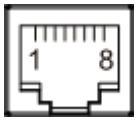
pins. It supports two independent DC power supply systems, PWR1 and PWR2. The power has nonpolarity. Voltage range: 12~48VDC.

➢ **Model II, Model III**



The Model II and Model III of the series provide 8 pins 5.08mm pitch terminal blocks, including 4 pins power supply terminal blocks on the left side. It provides two independent DC power supply systems of P1 and P2. The power has nonpolarity. Power supply range: 12~48VDC.

【Console Port Connection】



The series device provides 1 program debugging port based on serial port. The interface adopts RJ45 port which can conduct device CLI command management after connecting to PC.

Pin No.	2	3	5
Pin Definition	TXD	RXD	GND

【DIP Switch Settings】



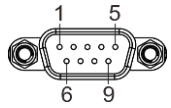
The model I of this series provides 4-pin DIP switch for function setting, where "ON" is the enabled end. The definitions of DIP switch are as follows:

DIP	Definition	Operation
1	Reserved	-
2	Restore Factory Settings	Set the switch to ON and wait for 5~10S, then set it back, wait for the device to restart
3	Reserved	-
4	Reserved	-

【Reset Button Setting】

The Model II and Model III of this series provide 1 reset button, press the button for 4-5S then release it to restore factory defaults.

【Serial Port Connection】



This series provides 3IN1 serial port, which supports RS-232, RS-485 and RS-422 at the same time. The interface type is DB9 male and its pin definitions are as follows:

PIN	RS-232	RS-422	RS-485
1	DCD	T-	-
2	RXD	T+	-
3	TXD	R+	D+
4	DTR	R-	D-
5	GND	GND	GND
6	DSR	-	-
7	RTS	-	-
8	CTS	-	-
9	-	-	-

【Checking LED Indicator】

The LED indicators on the front panel of this series device monitor the device working status, which has simplified the overall troubleshooting process. The function of each LED is described in the table as below:

LED	Indicate	Description
P1-P2	ON	PWR is connected and running normally
	OFF	PWR is disconnected or running abnormally
RUN	Blinking	The system is running normally
	OFF	The system is not running or running abnormally
	ON	System is running abnormally
LINK (1-2)	ON	LAN port has established valid network connection
	Blinking	LAN port is in an active network status
	OFF	LAN port hasn't established valid network connection
TX (Port1-2/4)	OFF	Port is not transmitting data or transmitting data abnormally
	Blinking	Serial port is transmitting data
RX (Port1-2/4)	OFF	No data or abnormal data is being received through serial port.
	Blinking	The port is receiving data

【Logging in to WEB Interface】

This device supports WEB management and configuration. Computer can access the device via Ethernet interface. The way of logging in to device's configuration interface via IE browser is shown as below:

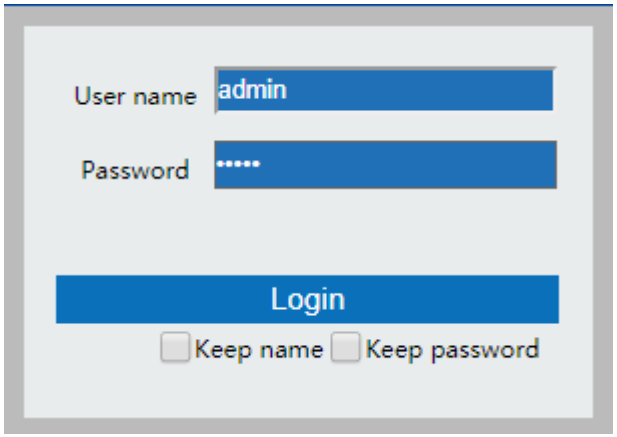
Step 1 Configure the IP addresses of computer and the device to the same network segment (The network segment of Network Port 1 is 1, and the network segment of network port 2 is 8), and the network between them can be mutually accessed.

Step 2 Enter device's IP address in the address bar of the computer browser.

Network Port 1: http://192.168.1.254/

Network Port 2: http://192.168.8.254/

Step 3 Enter device's username and password in the login window as shown below.



Step 4 Click “OK” button to login to the WEB interface of the device.

Note:

- The default IP address of the device network port 1 is “192.168.1.254”, port 2 is “192.168.8.254”.
- The default user name and password of the device are “admin”.
- If the username or password is lost, user can restore it to factory settings via device DIP switch, RESET button or management software; all modified configurations will be cleared after restoring to factory settings, so please backup configuration file in advance.
- Please refer to user manual for specific configuration method of logging in to WEB interface and other configurations about network management function.

【Performance Index】

Panel	
100M copper port	10/100Base-T(X) self-adapting RJ45 port
Serial Port	RS-232/485/422 3IN1, DB9 interface
Console port	CLI command management port (RS-232), RJ45
Indicator	Power indicator, Running status indicator, Network Link/Act indicator, Serial port transmission/receiving state indicator
Power Supply	
Input power supply	12~48VDC
Access terminal block	➢ Model I: 6-pin 5.08mm pitch terminal blocks, power supply occupies 4 pins in the left ➢ Model II, Model III: 8-pin 5.08mm pitch terminal blocks, power supply occupies 4 pins in the left
Power Consumption	
Model I	No-load: 1.68W@12VDC Full-load: 2.5W@12VDC
Model II	No-load: 1.8W@12VDC Full-load: 1.9W@12VDC
Model III	No-load: 1.4W@12VDC Full-load:1.6W@12VDC
Working Environment	
Working temperature	-40~75℃
Storage temperature	-40~85℃
Working humidity	5%~95% (no condensation)
Physical Characteristics	
Protection grade	IP40 (metal shell)
Dimension (W x H x D)	➢ Model I: 53mm×138mm×110mm ➢ Model II, Model III: 33mm×138mm×110mm
Mounting	DIN-Rail Mounting

【Disposal of Waste Electrical and Electronic Equipment (WEEE 2012/19/EU)】

(Applicable in the EU-member states)



The crossed-out wheeled bin symbol on the equipment or its packaging indicates that the product, at the end of its service life, shall not be mixed with unsorted municipal waste but should be collected separately, in accordance with local laws and regulations.

A proper separate collection of end-of-life equipment for the subsequent recycling, treatment and environmentally compatible disposal, will help prevent potential damage to the environment and human health, facilitating the reuse, recycling and/or recovery of its component materials.

Private users should contact their vendor or municipal waste management service and ask for disposal information.

Professional users should contact their suppliers and check the terms of their selling agreement.

This product must not be disposed of with other commercial waste.

Users’ cooperation in the correct disposal of this product will contribute to saving valuable resources and protecting the environment.