3onedata
Make network communication more reliable

NP302T Series
Serial Device Server
Quick Installation Guide

3onedata Co., Ltd.

Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Xili, Nanshan District, Shenzhen

Website: www.3onedata.com

Tel: +86 0755-26702688

Fax: +86 0755-26703485

【Package Checklist】

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

1. Serial Device Server 2. Straight-through cable
3. Power adapter 4. Warranty card
5. Qualify certificate

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

【Product Overview】

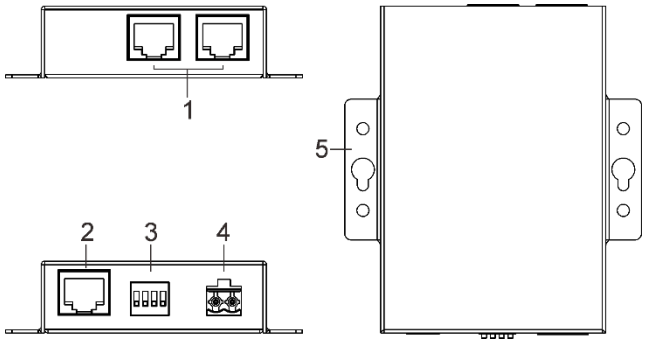
The product is serial device server which can provide serial device with networking capability instantly. Module as follow:

Model I. NP302T-2DI(RS-232)-P(9-48VDC) (2 isolated RS-232 serial ports + 1 100M Ethernet copper port)

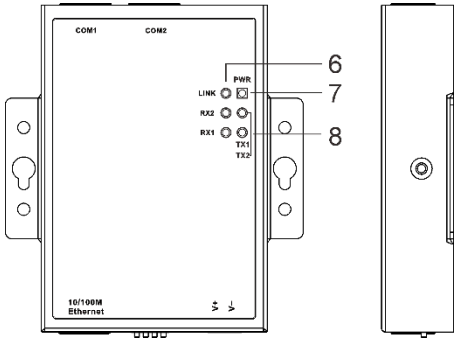
Model II. NP302T-2DI(RS-485)-P(9-48VDC) (2 isolated RS-485/422 serial ports + 1 100M Ethernet copper port)

【Panel Design】

➢ **Model I: Top view, Bottom view and Rear view**

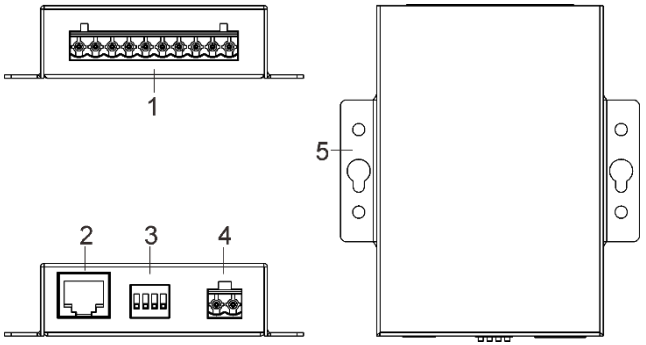


➢ **Model I: Front view and Side view**

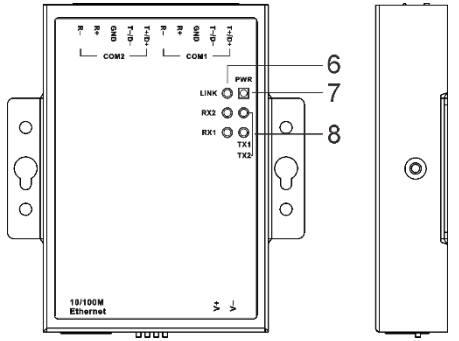


1. RS-232 serial port
2. 10/100Base-T(X) 100M Ethernet copper port
3. DIP switch
4. Power input terminal block
5. Mounting lugs
6. 100M Ethernet copper port status indicator
7. Power input status indicator
8. Serial port transmission and receiving data indicators

➢ **Model II: Top view, Bottom view and Rear view**



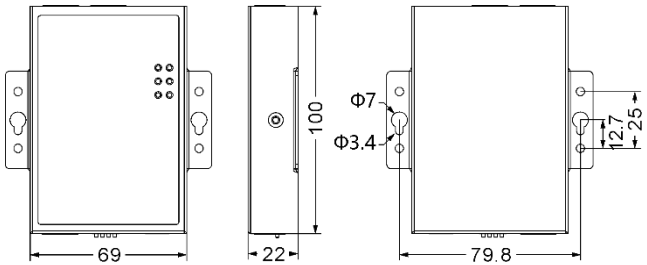
➢ **Model II: Front view and Side view**



1. RS-485/422 serial port
2. 10/100Base-T(X) 100M Ethernet copper port
3. DIP switch
4. Power input terminal block
5. Mounting lugs
6. 100M Ethernet copper port status indicator
7. Power input status indicator
8. Serial port transmission and receiving data indicators

【Mounting Dimension】

Unit: mm



Note Before Mounting:

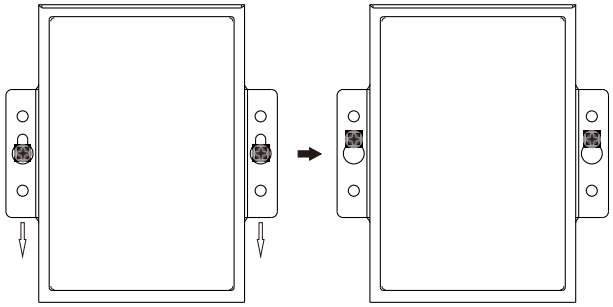
- Don't place or install the device in area near water or moist, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before power on, first confirm the supported power supply specification to avoid over-voltage damaging the device.
- The device surface temperature is high after running, please don't directly contact to avoid scalding.

【Wall Mounting】

Step 1 On the wall of device mounting, place the device on the wall for reference or reference the mounting dimension to mark the two screws position.

Step 2 Nail M4 screws on the wall and keep 2mm interspace reserved.

Step 3 Hang the device on two screws and slide downward, then tighten the screw to enhance stability, mounting ends.



【Device Disassembling】

Step 1 Device power off.

Step 2 Unscrew the screw on the wall about 2mm.

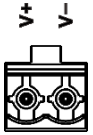
Step 3 Lift the device upward slightly; take out the device, disassembling ends.

Note Before Powering on:

- Power ON operation: first connect power line to the connection terminal of device power supply, then power on.
- Power OFF operation: first unpin the power plug, then remove the power line, please note the operation order above.

【Power Supply Connection】

➢ **DC power supply**



The serial device server provides 2-pin 5.08mm pitch industrial terminal blocks, in which V+ and V- are DC input. The power supply has nonpolarity and anti-reverse functions, Power supply range: 9～48VDC.

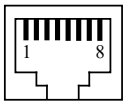
【DIP Switch Setting】

Provide 4-bits DIP switch for function setting, where "ON" is enable valid terminal. Please power off and power on after changing the status of DIP switch. DIP switch definition as follow:

DIP	Definition	Operation
1	Reserved	-
2	Restore factory setting	Set the code to ON and power on the device again, then set it back.
3	Reserved	-
4	Reserved	-

【Serial Port Connection】

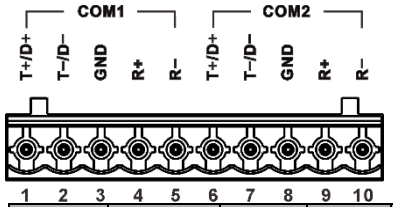
➢ **RS-232 serial port**



The Model I provides RS-232 port, serial device server adopts RJ45 connector. The PIN definition as follows.

PIN	1	2	3	4	5	6	7	8
RS-232	TXD	RXD	RTS	CTS	DSR	GND	DTR	DCD

➢ **RS-485/422 serial port**



The Model II provides RS-485/422 port, Serial device server adopts 5.08mm pitch terminal block. The PIN definition as follows.

COM1	PIN	1	2	3	4	5
	RS-422	T+	T-	GND	R+	R-
	RS-485	D+	D-	GND	—	—
COM2	PIN	6	7	8	9	10
	RS-422	T+	T-	GND	R+	R-
	RS-485	D+	D-	GND	—	—

【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	The power connection is operating normally.
	OFF	The power is not connected or is not working properly.
LINK	ON	The Ethernet interface has established an active network connection.
	Blinking	The Ethernet interface is in a network activity state.
	OFF	The Ethernet interface does not establish an active network connection.
TX (1-2)	OFF	No data or abnormal data is being transmitted through serial port.
	Blinking	Serial port is transmitting data.

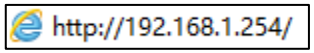
RX (1-2)	OFF	No data or abnormal data is being received through serial port.
	Blinking	Serial port is receiving data.

【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, and the network between them can be mutually accessed.

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



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 is "192.168.1.254".
- The default username and password of the device is "admin".
- If the username or password is lost, user can restore it to factory settings via device DIP switch 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.

【Specification】

Panel	
100M copper port	10/100Base-T（X）self-adapting RJ45 port, full/half duplex self-adaption, MDI/MDI-X self-adaption
RS-232 serial port	RJ45 port, with isolation
RS-485/422 serial port	10-pin 5.08mm pitch terminal block, with isolation
Indicator	Power indicator, Ethernet port indicator, Serial port transmission and receiving data indicator
Power supply	
Input power supply	9~48VDC, anti-reverse connection
Access terminal	2-pin 5.08mm pitch terminal block
Consumption	
NP302T-2DI(RS-232)-P(9-48VDC)	No-load: 0.72W@24VDC Full-load: 0.77W@24VDC
NP302T-2DI(RS-485)-P(9-48VDC)	No-load: 1.01W@24VDC Full-load: 1.03W@24VDC
Working environment	
Working temperature	-40~75℃
Storage temperature	-40~85℃
Working humidity	5%~95% (no condensation)
Protection grade	IP40 (metal shell)