



# NP304 series

## Quick Installation Guide

### 4-port RS-232/485/422 to Ethernet Serial Server(10/100M)

#### Introduction:

NP304 series can conveniently connect up to 4 serial devices to an Ethernet, allowing you to network your existing serial devices with only basic configuration. With NP304 series, you can both centralize the management of your serial devices, and distribute management hosts over the network.

NP304 series can be used to connect different devices for remote management, each serial port operates independently to provide maximum versatility, each port can be operate in Driver, TCP Server, and TCP Client mode independently.

#### Packing List:

NP304 series are shipped with following items.

1. NP304 series server × 1
2. User manual × 1
3. Quick Installation Guide × 1
4. Straight network cable × 1
5. 5VDC power adapter × 1
6. Software CD-ROM × 1
7. Product Warranty booklet × 1

#### Optional accessories:

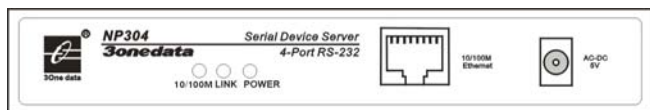
- DIN-Rail Mounting Kit (35mm) × 1

## Features:

1. Adopt 32 bit ARM processor, 125 DMIPS manage ability
2. 4 serial ports, with support for RS-232/RS-485/RS-422
3. Support 10/100M Ethernet
4. Support 300bps-460.8Kbps
5. Support TCP, UDP, ARP, ICMP, HTTP, TELNET and DHCP protocol
6. Support across gateway, router communication
7. Support standard TCP/IP SOCKET
8. Support Virtual serial driver access and auto connect after the network disconnect
9. Choice of configuration methods: Windows, TELNET and WEB
10. Support DIN-Rail or wall mounting installation

## Pinout Configuration:

### Front panel



### DC-IN: 5VDC power supply input

**10/100M Ethernet:** 10/100Base-T(X) Ethernet input and output

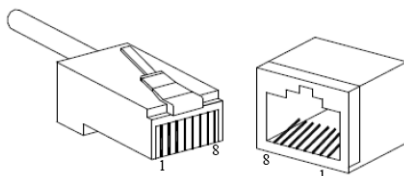
**POWER:** Bright all along when connect power supply

**LINK:** Bright all along when connected

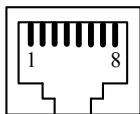
**10/100M:** ON is 100M, OFF is 10M

### 10/100Base-T(x) Ethernet port:

The 10/100BaseT(X) ports located on NP304 series front panel. The pin of RJ45 port display as below. Connect by UTP or STP. The connect distance is no more than 100m. 100Mbps is used 100Ω of UTP, 10Mbps is used 100Ω of UTP 3,4,5



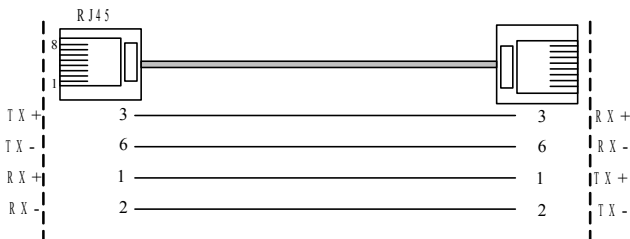
RJ45 port support automatic MDI/MDI-X operation. can connect the PC, Server, Converter and HUB by straight-through cable wiring . Pin 1, 2, 3, 6 Corresponding connection in MDI. 1→3, 2→6, 3→1, 6→2 are used as cross wiring in the MDI-X port of Converter and HUB. 10Base-T are used in MDI/MDI-X, the define of Pin in the table as below.



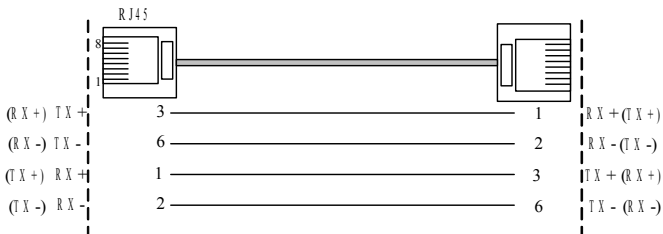
pin	MDI signal	MDI-X signal
1	TX+	RX+
2	TX-	RX-
3	RX+	TX+
6	RX-	TX-
4, 5, 7, 8	—	—

**Note: “TX±” transmit data±, “RX±” receive data±, “—”not use**

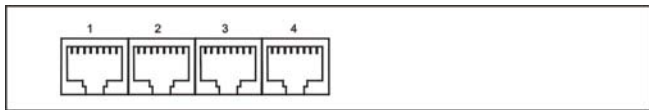
MDI(Straight-through cable):



MDI-X (Cross-over cable)



## Rear panel (RS-232/485/422 Port)



**NP304** 4-port RS232 to Ethernet

**NP304-2M** (2-port RS232+2-port RS485/422) to Ethernet

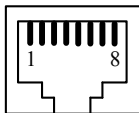
**NP304-4M** 4-port RS485/422 to Ethernet

### RS-485/422 (RJ45)

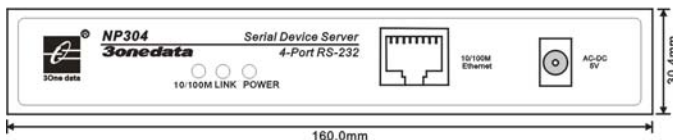
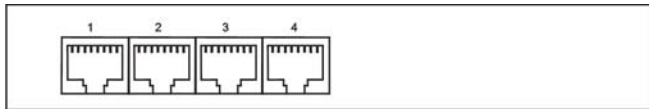
- |                     |                     |              |
|---------------------|---------------------|--------------|
| <b>1</b> TXD+/Data+ | <b>2</b> TXD-/Data- |              |
| <b>3</b> RXD+       | <b>4</b> RXD-       | <b>6</b> GND |

### RS-232 (RJ45)

- |              |              |              |              |
|--------------|--------------|--------------|--------------|
| <b>1</b> TXD | <b>2</b> RXD | <b>3</b> RTS | <b>4</b> CTS |
| <b>5</b> DSR | <b>6</b> GND | <b>7</b> DTR | <b>8</b> DCD |



## Dimension:



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## Specifications:

### Ethernet

Number of ports:1

Standard:10/100Base-T(X)

Speed:10/100M auto-sensing

Working mode: half /full duplex

Working: TCP Server, TCP Client, UDP and Real COM driver

Memory: Most 32Kbyte

Transmission: 100m

Electromagnetism isolate: 1KV

Connector: RJ45

### Serial

Standard: RS-232/RS-485/RS-422

Number of ports: 4

Signals: RS-232:DCD,RXD,TXD,DTR,GND,DSR,RTS,CTS

RS-485:Data+,Data-,GND

RS-422:TXD+,TXD-,RXD+,RXD-,GND

Parity: None, Even, Odd, Space, Mark

Data bits: 5bit, 6bit, 7bit, 8bit

Stop bits: 1, 1.5, 2

Baud rate: 300bps ~ 460.8Kbps

Flow control: RTS/CTS or XON/XOFF

Direction control: RS485 side adopt ADDC technology, auto text  
and control data transfer direction

Loading: RS-485/422 side support 32 nodes (customize 128 nodes)  
loopback

Transmission: RS-485/422 side 1200M,  
RS-232 port 15M

Interface protection: 1500W surge protection,  
15KV ESD protection

### Software

Network protocols: Support TCP, UDP, ARP, ICMP, HTTP,  
TELNET and DHCP

Driver support: Windows Real COM driver  
(Windows NT/2000, Windows XP/2003)

Configuration options: Windows, TELNET and WEB

## Power

Power input: 5VDC

Consumption: <1W

## Environment

Working temperature: -20°C ~ 60°C (-4F ~ 140F)

Storage temperature: -25°C ~ 85°C (-13F ~ 185F)

Humidity: Relative humidity 5% to 95%

## Appearance

Color: Black

L×W×H: 160.0mm×91.2mm×30.4mm

Material: Iron (Shell)

Weight: 240g

**Warranty: 5 years**

## Certifications:



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