



## NP304T Series

Wall/Desktop Mounting

4 RS-232/485/422 Serial Device Server

- Support 4 RS-232, RS-485/422 or 3IN1 serial port to 1 10/100Base-T(X) self-adaptive Ethernet interface
- Support RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast and other operating modes
- Support 12~48VDC wide voltage input range
- Support -40~75°C wide temperature operation



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## Introduction

NP304T series are the serial device server that can make serial device be equipped with networking capability instantly and centrally manage the scattered serial devices and hosts via network. This series include 3 types of products and provide 4 RS-232, RS-485/422 or 3IN1 serial port to 1 100M Ethernet copper port. Thereinto, RS-485/422 supports electromagnetic isolation of serial port. It adopts wall/desktop mounting to meet the requirements of different application scenes.

Serial device server supports multiple network protocols, such as TCP, UDP, SNMP, TELNET, ARP, ICMP, HTTP, DNS and DHCP protocol. It also possesses complete management functions, including Access Control, Rapid Configuration, Online Upgrading and so on. Each serial port supports 4 TCP or UDP session connections, and it also supports RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast operating modes and TELNET, WEB access modes. Furthermore, supplied management configuration tool based on Windows platform can guide the user to manage and configure the device, achieving immediate networking of serial device via simple settings. It can provide users with good experience with friendly design of network management system interface, simple and convenient operation.

DIP switch or RST button can achieve restore factory defaults of the device. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in PLC control and management, Building Automation System, Health Care Automation System, measuring instrument and environmental forces monitoring system.

## Features and Benefits

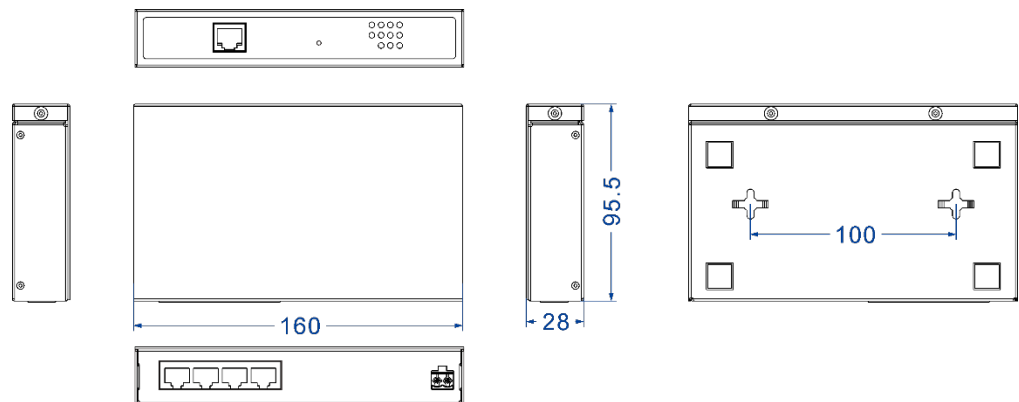
- ⦿ Support 10/100Base-T(X) self-adaptive Ethernet interface
- ⦿ Support 300bps-115200bps line speed and non-blocking communication
- ⦿ Support RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast and other operating modes
- ⦿ Support across gateway and routing communication
- ⦿ Support multiple hosts polling mode, which allows multiple hosts to access the same serial port
- ⦿ Support delimiter matching communication, achieving various demands for serial port packaging
- ⦿ Support FIFO, compatible with various old type terminal devices
- ⦿ Support IP address and MAC address filtering, which can easily achieve accurate access control
- ⦿ Support classification of user management to realize humanized permission management

- ⦿ Support serial port status and parameters monitoring, ensuring the communication status be clear at a glance
- ⦿ Support RTS/CTS, DTR/DSR and XON/XOFF flow control
- ⦿ Support SNMP network management
- ⦿ Compatible with various virtual serial port management software
- ⦿ Support virtual serial port drive access mode and automatic connection recovery after network interruption
- ⦿ Flexible serial port data framing setting, which can satisfy user's various demands for data packets segmentation
- ⦿ Support standard TCP/IP SOCKET application access
- ⦿ TCP supports multi-connection, which allows maximum 4 users to monitor or manage the serial device simultaneously
- ⦿ UDP supports single machine or multi-machine communication, which allows multiple users to monitor or manage the serial device simultaneously
- ⦿ Support Windows configuration tool, TELNET, WEB and other configuration forms

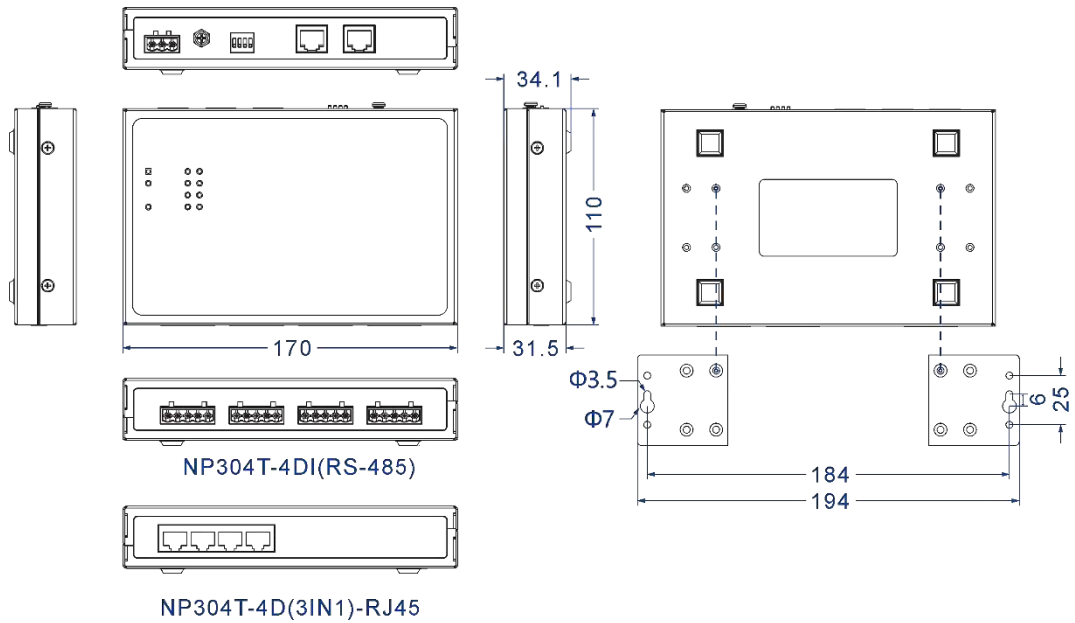
## Dimension

Unit:mm

- NP304T-4D(RS-232)



- NP304T-4DI(RS-485), NP304T-4D(3IN1)-RJ45



## Specification

Ethernet	<p>Standard: 10Base-T, 100Base-TX</p> <p>Protocol: TCP, UDP, ARP, HTTP, TELNET, SNMP, ICMP, DHCP, DNS</p> <p>Rate: 10/100M automatic flow control, MDI/MDI-X autotuning</p> <p>Interface quantity: 1</p> <p>Interface form: RJ45</p> <p>Duplex mode: full/half duplex mode self-adaption</p> <p>Operating mode: 4 sessions, support RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang and UDP Multicast operating modes</p>
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Serial Port	<p>Standard: EIA RS-232C, RS-485, RS-422</p> <p>Quantity of serial port: 4 RS-232, RS-485/422 or 3IN1 serial port</p> <p>RS-232 signal: DSR, RTS, GND, TXD, RXD, DCD, CTS, DTR</p> <p>RS-485 signal: D+, D-, GND</p> <p>RS-422 signal: T+, T-, GND, R+, R-</p> <p>Baud rate: 300-115200bps</p> <p>Data bit: 5bit, 6bit, 7bit, 8bit</p> <p>Parity bit: None, Even, Odd, Space, Mark</p> <p>Stop bit: 1bit, 2bit</p> <p>Interface form: RS-232 serial port, adopt RJ45; RS-485/422 serial port with isolation, adopt 5 pins 5.08mm pitch terminal blocks 3IN1 serial port, adopt RJ45</p> <p>Flow control: RTS/CTS, DTR/DSR, XON/XOFF</p> <p>Direction control: RS-485 direction adopts data flow automatic</p>
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control technology  
 Load capacity: RS-485/422 end supports 32 points polling  
 (customizable 128 points)  
 Pull high/low resistor for RS-485: 4.7kΩ  
 Electromagnetic isolation strength: RS-485/422 serial port (terminal  
 block), 3KVDC/2KVrms

<b>Configuration</b>	WEB configuration management, TELNET configuration, Windows configuration tool
<b>Security</b>	Classification of User Permissions, IP address filtering, MAC address filtering, WEB console, TELNET console
<b>Indicator</b>	Power supply indicator, running indicator, Ethernet port indicator, serial port indicator
<b>Power Requirement</b>	<p>NP304T-4D(RS-232)</p> <ul style="list-style-type: none"> <li>● Power supply range: 9~48VDC</li> <li>● Connection mode: 2-pin 5.08mm pitch terminal blocks</li> </ul> <p>NP304T-4DI(RS-485), NP304T-4D(3IN1)-RJ45</p> <ul style="list-style-type: none"> <li>● Power supply range: 12~48VDC</li> <li>● Connection mode: 3-pin 5.08mm pitch terminal blocks</li> <li>● Power supply protection: nonpolarity connection</li> </ul>
<b>Power Consumption</b>	<p>No-load: ≤2.94W@12VDC                  Full-load: ≤3.00W@12VDC</p>
<b>Environmental Limit</b>	<p>Operating temperature range: -40~75°C                  Storage temperature range: -40~85°C                  Relative humidity: 5% ~ 95% (no condensation)</p>
<b>Physical Characteristic</b>	<p>Housing: IP30 protection, metal                  Installation: wall/desktop mounting                  Dimension (W x H x D): 160mm×28mm×95.5mm (RS-232);                  170mm×31.5mm×110mm (RS-485/422,                  3IN1)                  Weight: ≤590g</p>
<b>Industrial Standard</b>	<p>IEC 61000-4-2 (ESD, Electro-static Discharge) , Level 4</p> <ul style="list-style-type: none"> <li>● Air discharge: ±15kV</li> <li>● Contact discharge: ±8kV</li> </ul> <p>IEC 61000-4-4 (EFT/B, Electrical Fast Transient/Burst), Level 3 (not including RS-232)</p> <ul style="list-style-type: none"> <li>● Power supply: ±2kV</li> <li>● Signal: ±1kV</li> </ul> <p>IEC 61000-4-5 (Surge), Level 3 (not including RS-232)</p>

- Power supply: common mode  $\pm 2\text{kV}$ , differential mode  $\pm 1\text{kV}$
- Signal: common mode  $\pm 2\text{kV}$ , differential mode  $\pm 1\text{kV}$

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Certification	CE, FCC, RoHS
Warranty	3 years



## Ordering Information

Part No	Article No/SKU	Description
NP304T-4D(3IN1)	AT-NP304T-4D(3IN1)	Serial Device Server 4 x RS-232/485/422(RJ-45) +1 x10/100Base-T(X), single power supply 12-48VDC, wall-mounting

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