

## NP318T Series

Wall/Desktop Mounting

8 RS-232/485/422 to 2 100M Ethernet Ports Serial Device Server

- Support 8 RS-485/422 or 3IN1 serial port to 2 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



## Introduction

NP318T 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 2 types of products and provide 8 RS-485/422 or 3IN1 serial port to 2 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 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 2 10/100Base-T(X) self-adaptive Ethernet interfaces, which provide double IP and MAC addresses to meet the requirements of network management or backup
- ⊙ 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

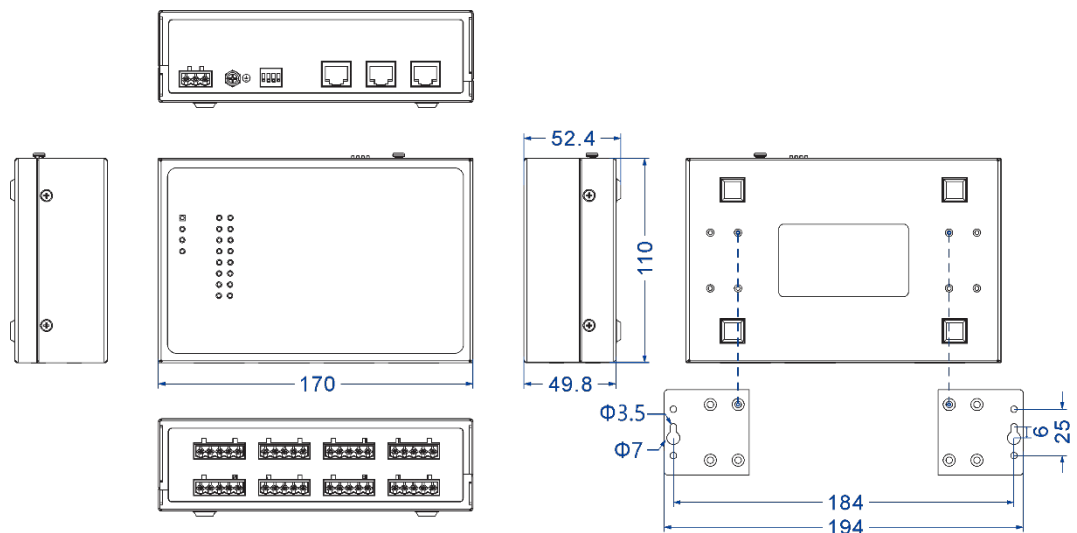
management

- ⊙ 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

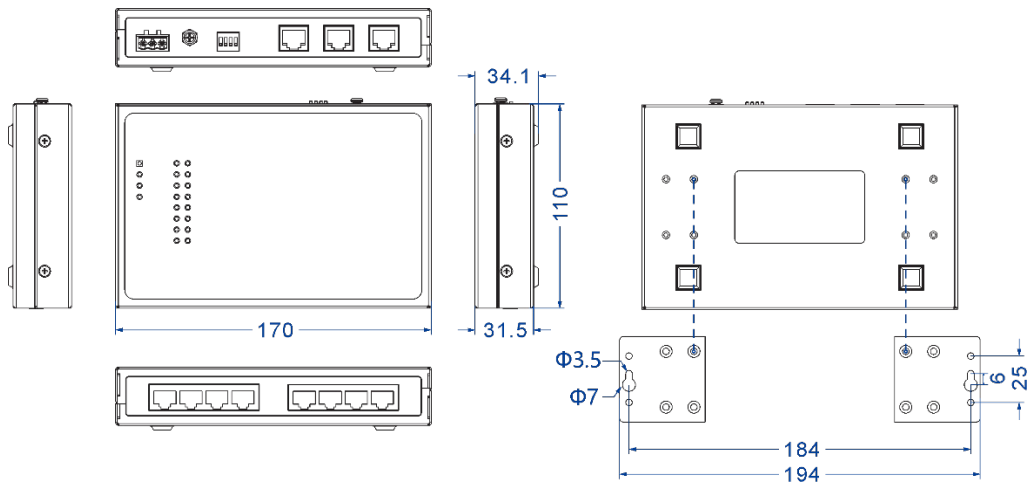
## Dimension

Unit:mm

- NP318T-8DI(RS-485)



- NP318T-8D(3IN1)-RJ45



## Specification

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

Electromagnetic isolation strength: RS-485/422 serial port (terminal block), 3KVDC/2KVrms

Configuration	WEB configuration management, TELNET configuration, Windows configuration tool		
Security	Classification of User Permissions, IP address filtering, MAC address filtering, WEB console, TELNET console		
Indicator	Power supply indicator, running indicator, Ethernet port indicator, serial port indicator		
Power Requirement	12~48VDC, 3-pin 5.08mm pitch terminal blocks Power supply nonpolarity		
Power Consumption	Model	No-load (@12VDC)	Full-load (@12VDC)
	NP318T-8DI(RS-485)	3.16W	3.72W
	NP318T-8D(3IN1)-RJ45	1.80W	3.90W
Environmental Limit	<p>NP318T-8DI(RS-485)</p> <ul style="list-style-type: none"> <li>● Operating temperature: -40~70°C</li> <li>● Storage temperature: -40~70°C</li> <li>● Relative humidity: 5% ~ 95% (no condensation)</li> </ul> <p>NP318T-8D(3IN1)-RJ45</p> <ul style="list-style-type: none"> <li>● Operating temperature range: -40~75°C</li> <li>● Storage temperature range: -40~85°C</li> <li>● Relative humidity: 5% ~ 95% (no condensation)</li> </ul>		
Physical Characteristic	<p>Housing: IP30 protection, metal                      Installation: wall/desktop mounting                      Dimension (W x H x D): 170mm×49.8mm×110mm(RS-485/422);                      170mm×31.5mm×110mm(3IN1)                      Weight: 740g(RS-485/422), 590g(3IN1)</p>		
Industrial Standard	<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</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</p> <ul style="list-style-type: none"> <li>● Power supply: common mode ±2kV, differential mode ±1kV</li> <li>● Signal: common mode ±2kV, differential mode ±1kV</li> </ul> <p>Shock: IEC 60068-2-27</p>		

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Certification	CE, FCC, RoHS
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Warranty 3 years



## Ordering Information

Available Models	100M Copper Port	RS-485/422 (with isolation)	3IN1 (RS-232/485/422)	Power Supply Range
NP318T-8DI(RS-485)	2	8	—	12~48VDC
NP318T-8D(3IN1)-RJ45	2	—	8	



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