NP301

Wall Mounting

1 RS-232/RS-485/RS-422 Serial Device Server

- Support 1 serial port to 1 10/100Base-T(X) self-adaptive Ethernet interface
- Support TCP Server, TCP Client, TCP Auto, UDP, Advanced TCP Server, Advanced UDP and other operating modes
- Support 9~48VDC wide voltage input range
- Support -40~75℃ wide temperature operation

Introduction

NP301 is 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. The product supports 1 RS-232/RS-422 /RS-485 to 1 100M Ethernet copper port. It adopts wall mounting to meet the requirements of different application scenes.

Serial device server supports multiple network protocols, such as TCP, UDP, 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 TCP Server, TCP Client, TCP Auto, UDP, Advanced TCP Server, Advanced UDP operating modes and AT, 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.

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.
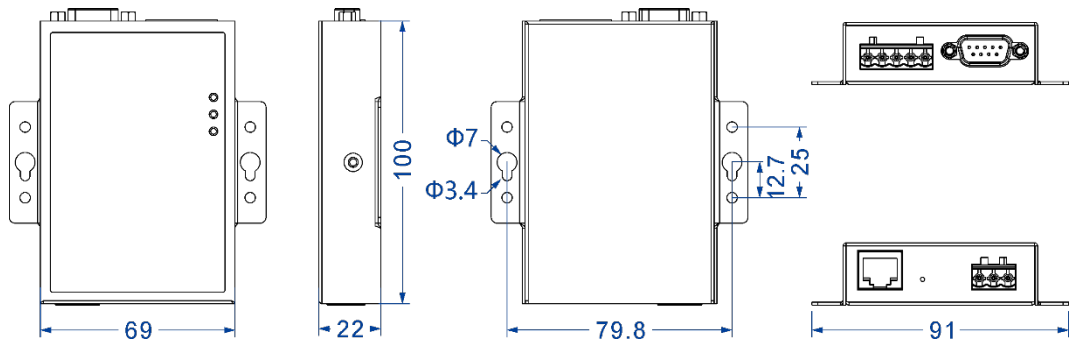
Features and Benefits

- ⊙ Adopt 32 bits ARM processor
- ⊙ Support 10/100Base-T(X) self-adaptive Ethernet interface
- ⊙ Support AUTO MDI/MDIX, which can be connected via crossover cable and straight-through cable
- ⊙ Support 300bps-115200bps line speed and non-blocking communication
- ⊙ Support low power consumption mode and high performance mode
- ⊙ Support TCP Server, TCP Client, TCP Auto, UDP, Advanced TCP Server and Advanced UDP operating mode
- ⊙ Support AT command, which is convenient for the secondary development of users
- ⊙ Support DNS, which can achieve communication via domain name
- ⊙ Support across gateway and routing communication
- ⊙ 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, serial port, WEB and other configuration forms

⊙ Support local and remote system firmware upgrading

Dimension

Unit:mm

Specification

Ethernet	Standard: 10Base-T, 100Base-TX Protocol: TCP, UDP, ARP, HTTP, ICMP, DHCP, DNS Rate: 10/100M automatic flow control, MDI/MDI-X autotunning Interface quantity: 1 Interface form: RJ45 Duplex mode: full/half duplex mode self-adaption Operating mode: 4 sessions, support TCP Server, TCP Client, UDP, TCP Auto, Advanced TCP Server and Advanced UDP
Serial Port	Standard: EIA RS-232C, RS-485, RS-422 Quantity of serial port: 1 RS-232 or RS-485/422 serial port RS-232 signal: RXD, TXD, DTR, GND, DSR, RTS, CTS 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, 1.5bit, 2bit Interface form: RS-232, adopt DB9 male; RS-485/422, adopt 5 pins 5.08mm pitch terminal blocks

Directional 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

Configuration	WEB configuration management, serial port AT command, Windows configuration tool
Security	Classification of User Permissions
Indicator	Power supply indicator, Ethernet port indicator, serial port indicator
Power Requirement	9~48VDC, 3 pins 5.08mm pitch terminal blocks Support reverse polarity protection
Power Consumption	No-load: 0.80W@12VDC Full-load: 0.84W@12VDC
Environmental Limit	Operating temperature range: -40~75℃ Storage temperature range: -40~85℃ Relative humidity: 5%～95%（no condensation）
Physical Characteristic	Housing: IP40 protection, metal Installation: wall mounting Dimension (W x H x D): 69mm×22mm×100mm Weight: 240g
Industrial Standard	IEC 61000-4-2 (ESD, Electro-static Discharge)，Level 3 ● Air discharge: ±8kV ● Contact discharge: ±6kV IEC 61000-4-4 (EFT/B, Electrical Fast Transient/Burst), Level 3 ● Power supply: ±2kV ● Ethernet interface: ±1kV ● Serial port: ±1kV IEC 61000-4-5 (Surge), Level 2 ● Power supply: common mode ±2kV, differential mode ±1kV ● Ethernet interface: ±2kV ● Serial port: common mode ±1kV, differential mode ±1kV 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

Available Models	100M Copper Port	RS-232/RS-422/RS-485	Power Supply Range
NP301	1	1	9~48VDC

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