3onedata
Reliable Connections



NP301

Wall Mounting

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

- Support 1 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 9~48VDC wide voltage input range
- Support -40~75℃ wide operating temperature range

Introduction

NP301 is a serial port networking server that gives serial port networking capability immediately. It can centrally manage scattered serial device, host, etc via network. This product supports 1 RS-232, RS-422 or RS-485 serial port 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, 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.

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.

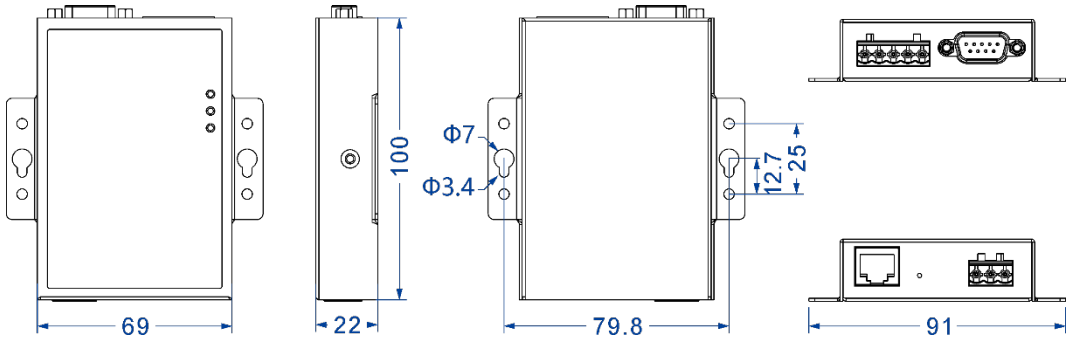
Features and Benefits

- Adopt 32-bit ARM processor
- Support 10/100Base-T(X) self-adaptive Ethernet interface
- Support AUTO MDI/MDIX, and can use crossed networking wire or direct networking wire connection
- Support 300bps-115200bps line speed and non-blocking communication
- Support low power consumption mode and high-performance mode
- Support RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast and other operating modes
- Support cross-gateway and cross-router 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 achieve accurate access control easily
- Support graded user management to implement humanized authority 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
- 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 multiple configuration forms including Windows configuration tool, serial port and WEB

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-adaptive 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

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, adopts DB9 male head; Rs-485/422, adopts 5-pin 5.08mm pitch terminal blocks Directional control: RS-485 direction adopts Automatic Data Direction 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 Method	WEB configuration management, TELNET configuration, Windows configuration tool
Security	Classification of User Permissions, IP Address Filtering, MAC Address Filtering
Indicator	Power supply indicator, Ethernet port indicator, serial port indicator
Power Supply	9~48VDC, 3-pin 5.08mm pitch terminal blocks Power supply supports anti-reverse connection protection
Power Consumption	No-load: 0.80W@12VDC Full-load: 0.84W@12VDC
Working Environment	Operating temperature: -40~75℃ Storage temperature: -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, electrostatic discharge), Level 3 ● Air discharge: ±8kV ● Contact discharge: ±6kV

	IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3 ● Power supply: ±2kV ● Ethernet port: ±1kV ● Serial port: ±1kV IEC 61000-4-5 (Surge), Level 2 ● Power supply: common mode±2kV, differential mode±1kV ● Ethernet port: ±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
Authentication	CE, FCC, RoHS
Warranty	3 years

Ordering Information

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

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