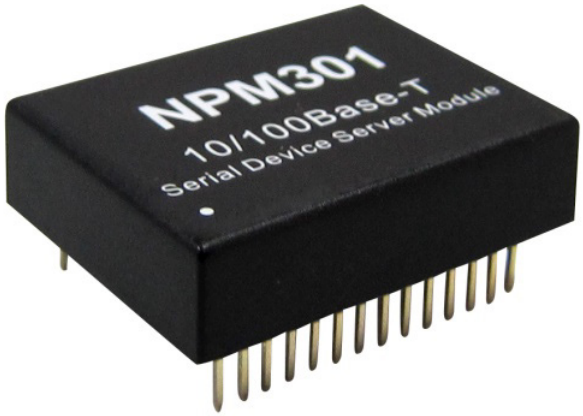
3onedata
Reliable Connections



NPM301

3.3V TTL level input

1 Serial Port to 1 100M Ethernet Port Serial Server Module

- 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
- Input voltage: 3.3VDC
- Support -40~75℃ wide operating temperature range

Introduction

NPM301 is a high-performance embedded serial port-to-Ethernet module, which supports one RS-232, RS-422 or RS-485 to one 100M Ethernet port. Using this module can easily realize the networking function of embedded devices, save a lot of research and development costs, and enable products to be put into the market quickly.

Serial device server supports multiple network protocols, such as TCP, UDP, 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.

All settings of NPM301 are realized through serial port or network, which can be used as communication processor between serial device and PC, or remote communication between multiple serial devices. 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

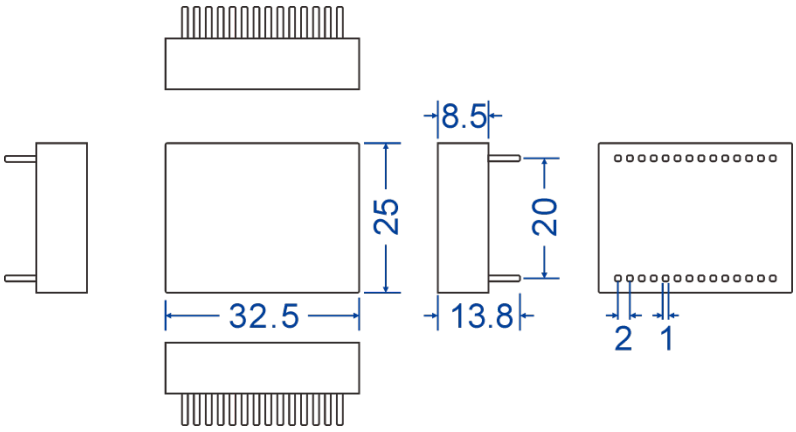
- Adopt 32 bit ARM processor
- Support 10/100Base-T(X) self-adaptive Ethernet interface
- Support AUTO MDI/MDIX and can be connected using either cross-wire or through wire
- Support 300bps-115200bps line speed and non-blocking communication
- Support RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast and other operating modes
- Support 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 like Windows configuration tool, serial port and WEB

Dimension

Unit: mm



Specification

System Information	32-Bit ARM core Standard: 10/100Base-T(X) Protocol: TCP, UDP, ARP, HTTP, DHCP and DNS protocols are supported Rate: 10/100M Work mode: full duplex mode or half duplex mode
Ethernet port	1 100M Ethernet port

Serial Port	TTL: TXD, RXD, CTS, RTS, DTR, DSR, GND Baud rate: 300-115200bps Data bit: 5bit, 6bit, 7bit, 8bit Parity bit: None, Even, Odd, Space, Mark Stop bit: 1bit, 1.5bit, 2bit
Configuration Method	WEB configuration management, Windows HyperTerminal, BlueEyes_II management software
Security	Classification of User Permissions, IP Address Filtering, MAC Address Filtering
Serial Server Function	1 serial port, each serial port supports 4 TCP or UDP session connections; Multiple operating modes: RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang and UDP Multicast operating modes
Indicator	Interface indicator
Power Supply	3.3VDC (±5%)
Power consumption	No-load: 0.6W@3.3VDC Full-load: 0.7W@3.3VDC
Working Environment	Operating temperature: -40~75℃ Storage temperature: -40~85℃ Relative humidity: 5%~95% (no condensation)
Physical Characteristic	Type: pin-type independent module Dimension (W x H x D): 32.5mm×13.8mm×25mm (pin included) Pin:14 pins in the left row and 14 pins in the right row, the pin spacing is 2mm Weight: 7g
Authentication	CE, FCC, RoHS
Warranty	3 years

Ordering Information

Available Models	100M Ethernet port	RS-232/RS-422/RS-485	Power Supply
NPM301	1	1	3.3VDC (±5%)

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