



NPM301

3.3V TTL Level Input

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

- Support 1 serial port to 1 10/100 Base-T(X) self-adaptive Ethernet port
- Support TCP Server, TCP Client, TCP Auto, UDP, Advanced TCP Server, Advanced UDP and other operating modes
- Input voltage: 3.3VDC
- Support -40 ~ 75°C wide operating temperature range



Introduction

NPM301 is a high performance embedded serial port to Ethernet module, it supports 1 RS-232, RS-422 or RS-485 to 1 100M Ethernet port. The module can easily achieve networking of embedded device, which can save lots of cost for research and development and accelerate the products release.

Serial port baud rate of the module is 300-115200bps. It supports TCP Server, TCP Client, TCP Auto, UDP and Real COM operating mode. It supports maximum 4 TCP/UDP connections and domain name access.

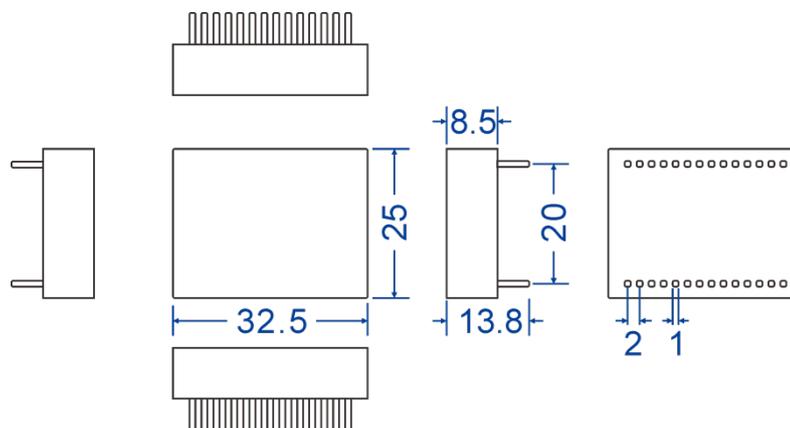
All settings of NPM301 are achieved via serial port or network. It can be used as communication processor between serial device and PC or used for remote communication among multiple serial devices. It can be widely used in PLC control and management, Building Automation System, Health Care Automation System, measuring instrument and environmental forces monitoring system.

Features and Benefits

- ⊙ Adopt 32 bits ARM processor
- ⊙ Support 10/100 Base-T(X) self-adaptive Ethernet port
- ⊙ Support AUTO MDI/MDIX, connectable to crossover cable or straight through cable
- ⊙ Support 300bps-115200bps line speed non-blocking communication
- ⊙ Support low power consumption mode and high performance mode
- ⊙ Support TCP Server, TCP Client, TCP Auto, UDP and Real COM driver operating mode, operating port, destination IP address and port can all be configured
- ⊙ Operating port, destination IP address and port can be configured
- ⊙ Built-in WEB server, which is convenient for user to conduct webpage configuration
- ⊙ Support AT command, which is convenient for the user secondary development
- ⊙ Support DNS to meet the requirements of achieving communication via domain name
- ⊙ Support virtual serial port drive access mode and automatic connection recovery after network interruption
- ⊙ Support flexible serial port data frame segmentation to meet user's demand for message segmentation
- ⊙ Support SOCKET operating mode (TCP Server, TCP Client, UDP)
- ⊙ TCP supports multiple connections, so maximum four users can manage an embedded module device at the same time
- ⊙ Support single or multiple machine communication under UDP mode, so multiple users can simultaneously manage an embedded module device
- ⊙ Support SOCKET, serial port and WEB configuration
- ⊙ Support local and remote system software upgrading

Dimension

Unit: mm



Specification

System Information	<p>32 bits ARM inner core</p> <p>Standard: 10/100Base-T(X)</p> <p>Protocol: support TCP, UDP, ARP, HTTP, DHCP and DNS protocol</p> <p>Speed: 10/100M</p> <p>Operating mode: full duplex or half duplex</p>
Ethernet Interface	1 100M Ethernet port
Serial Port	<p>TTL: TXD, RXD, CTS, RTS, DTR, DSR, GND</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, 1.5bit, 2bit</p>
Configuration	<p>WEB configuration management, WINDOWS hyper terminal,</p> <p>BlueEyes_II management software</p>
Security	User permission classification
Serial device server	<p>1 serial device server, support 4 TCP or UDP session connections;</p> <p>Multiple operating modes: TCP Server, TCP Client, UDP, TCP auto, Realcom, advanced TCP Server and advanced UDP</p>

Indicator	Interface indicator		
Power supply	3.3VDC (±5%)		
Consumption	Consumption	No-load@3.3VDC	Full-load@3.3VDC
	Low consumption mode	0.29W	0.42W
	High performance mode	0.50W	0.64W
Environmental Limits	Operating temperature: -40 ~ 75°C		
	Storage temperature: -40 ~ 85°C		
	Relative humidity: 5%~95% (no condensation)		
Mechanical structure	Type: pin type independent module		
	Size (W×H×D): 32.5mm×13.8mm×25mm (with pins)		
	Pin header: 14 pins on the left row, 14 pins on the right row, pin header spacing is 2mm		
	Weight: 9g		
Certification	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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