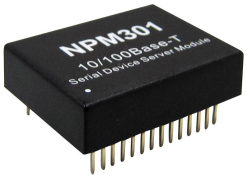
NPM301

3.3V TTL to 10/100M Ethernet

Embedded Serial Device Server Module

Features

- Adopt 32 bit ARM processor
- Support 3.3VDC TTL
- Support 10/100M self-adaptive Ethernet Interface
- Support ATUO MDI/MDIX, Support Baud rate between 300bps-115.2Kbps
- Support TCP, UDP, ARP, ICMP, HTTP and DHCP protocol
- Build-in WEB server, allowing users to configure their webpage easily
- Auto reconnection after a network break, ensure the reliable TCP connection for the whole network
- Support across gateway, router communication
- Compatible to SOCKET working modes (TCP Server, TCP Client, UDP and etc.)
- The upper layer machine software is written strictly following the SOCKET rules
- Support Windows serial interface driver mode
- Support Virtual serial driver access and auto connect once the network disconnect
- Support network and serial interface (AT) configuration mode
- Low consumption design
- Working temperature: -40～75℃



Introduction

NPM301 is a multi-functional embedded Serial-to-Ethernet data converter device developed by Shenzhen 3onedata Technology Co., Ltd.; it integrates the TCP/IP protocol stack, which allows users to apply the network functions to their embedded devices easily without knowing the complex knowledge on network or TCP/IP protocols. It can save the expense on network interface and shorten the development period, further reduce the time to market and make the product more competitive to others. It supports TCP, UDP, ARP, ICMP, DHCP and Windows Native COM functions.

What's more, NPM301serial devices server provides powerful management configuration tools based on Windows, guiding users' configuration of the devices step by step. All configurations can be done by network and serial port, supporting communication across gateway and router. In addition, it allows users to configurate flexibly IP address, Server or Client mode, size of packet, etc.

Specification

Ethernet Interface

Standard: 10Base-T, 100Base-TX

Protocol: Support TCP, UDP, APR, HTTP, ICMP, DNS and DHCP protocol

Signal: Rx+, Rx-, Tx+, Tx-

Speed: 10/100Mbps

Working: Full-duplex and half-duplex

Working mode: Support TCP Server and TCP Client

Transmission: 100m

Serial interface:

Serial interface: 3.3VDC TTL

TTL: TXD, RXD, CTS, RTS, DTR, DSR, GND

Parity bit: None, Even, Odd, Space, Mark

Data bit: 5bit, 6bit, 7bit, 8bit

Stop bit: 1bit, 1.5bit, 2bit

Baud rate: 300bps~115200bps

Flow control: none

Power supply

Power input: 3.3VDC ±5%

No-load consumption: 0.29W@3.3VDC

Full-load consumption: 0.64W@3.3VDC

Environment

Working temperature: -40℃~75℃

Storage temperature:-40℃~85℃

Humidity: Relative humidity 5%~95%（no condensation）

Structure

L×W×H: 32.5mm×25mm×8.5mm

Weight: 9g

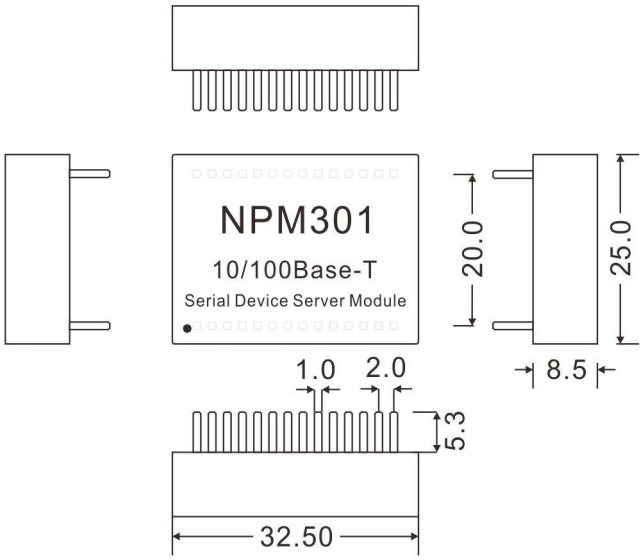
Certification

CE, FCC, RoHS, UL508 (Pending)

Warranty: 3 years

Dimension

Unit (mm)



Packing List

1. NPM301 ×1