NP6100-2T-16DI(3IN1)-RJ-2P(85-265VAC)

Rack Mounting

16 RS-232/485/422 3IN1 Serial Device Server

- Support 16 3IN1 serial ports to 2 10/100Base-T(X) self-adaptive Ethernet interfaces

- Support network modes such as redundant mode, switching mode and dual IP mode to meet the needs of various network environments

- Support RealCom, Reverse RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast, Telnet, Reverse Telnet, RFC2217, Redundant COM, DRDAS RealCom, DRDAS TCP Server and other operating modes

- Support dual power supply 85~265VAC wide voltage input range

- Support -40~75℃ wide temperature operation

- Support OLED display, whose device information could be configured

Industrial Grade   **RPS**   **IP40**

Introduction

NP6100-2T-16DI(3IN1)-RJ-2P(85-265VAC) is 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. This product supports 16 RS-232/485/422 serial ports to 2 100M Ethernet copper ports. It adopts rack mounting to meet the requirements of different application scenes.

Serial device server supports multiple network protocols, such as TCP, UDP, RFC2217, TELNET, ARP, ICMP, HTTP, HTTPS, SNMP, SSH, SMTP, SNTP, DNS, BOOTP 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 sessions, and it also supports RealCom, Reverse RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast, Telnet, Reverse Telnet, RFC2217, Redundant COM, DRDAS RealCom and DRDAS TCP Server work modes and TELNET, WEB and SSHD 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. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

This product supports OLED display, which could conduct IP address configuration without using external device. SD card can achieve software upgrade of the device. The design of DIP switch could achieve restore device factory, set pull up/down resistance and terminal resistance of each serial port. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can adapt to the industrial scene environment with harsh requirements for EMC. It can be widely used in custom checkpoint system, smart gas station, data center and industrial automation, etc.
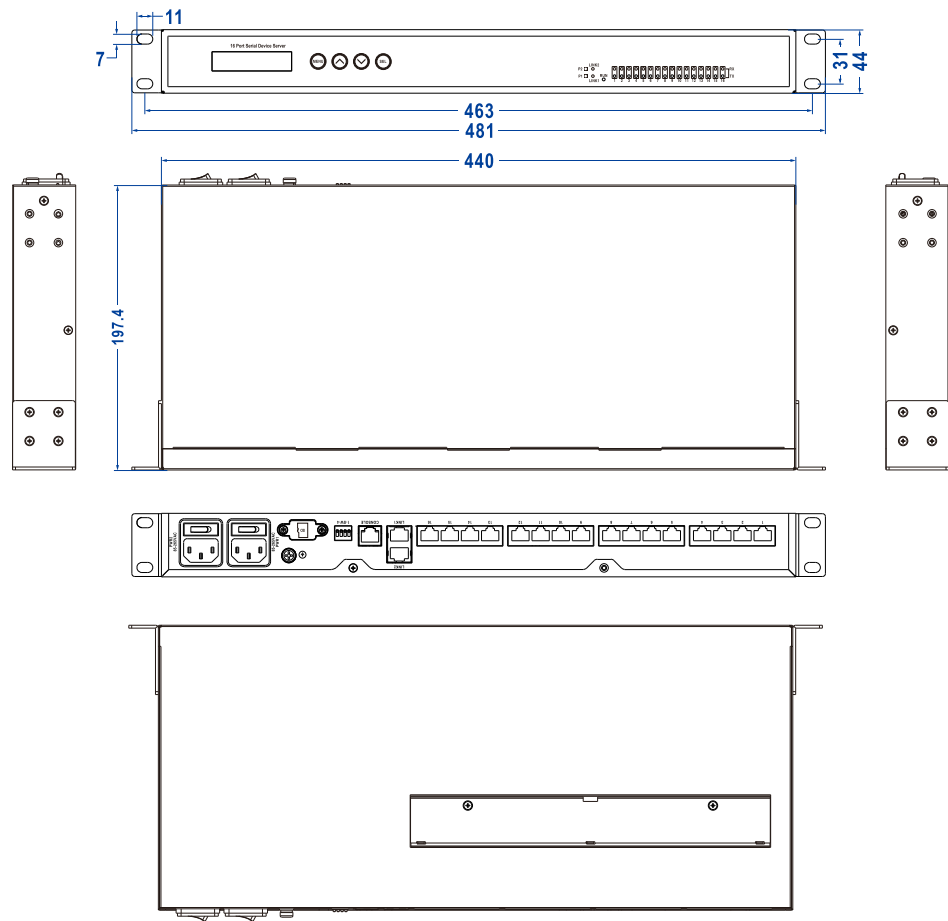
Features and Benefits

- Support 2 10/100Base-T(X) self-adaptive Ethernet interfaces and provide dual IP and MAC addresses to meet the requirements of multi-network management or network backups
- Support 110bps-921600bps line speed and non-blocking communication
- Support RealCom, Reverse RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast, Telnet, Reverse Telnet, RFC2217, Redundant COM, DRDAS RealCom, DRDAS TCP Server and other operating modes
- Support OLED display that could configure device IP address
- Support setting pull up/down resistor and terminal resistance by DIP switch
- 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, parameters and communication statistical monitoring, making the communication status easy to read
- ⊙ Support RTS/CTS, DTR/DSR and XON/XOFF flow control
- ⊙ 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 TELNET and Reverse TELNET modes, build TELNET protocol session to realize the conversion of serial port data and Ethernet data between terminal device and server
- ⊙ Support RFC2217 protocol, which can make serial port present in the host as local COM port
- ⊙ Support multiple configuration forms like Windows configuration tool, TELNET, SSHD and WEB
- ⊙ SSHD and HTTPS can guarantee the access security of data
- ⊙ Support multiple alarm methods, including e-mail alarm, log alarm and system alarm
- ⊙ Support multiple alarm events including power supply connection, warm start, cold start, DCD and DSR
- ⊙ Conduct network diagnosis and troubleshooting via Ping and Traceroute
- ⊙ Support ARP function, which can avoid the failure of communication due to the MAC address of serial server being aged by switch or router.
- ⊙ Support static routing, routing table could be added manually

Dimension

Unit: mm

Specification

Ethernet	Standard: 10Base-T, 100Base-TX
	Protocol: TCP, UDP, ARP, HTTP, HTTPS, TELNET, ICMP, SMTP, SNTP, DHCP, DNS
	Rate: 10/100M Automatic Flow Control, MDI/MDI-X Autotunning
	Interface form: RJ45
	Interface quantity: 2
	Duplex mode: Full/Half Duplex Mode Self-adaption
	Work mode: each serial port can simultaneously establish up to 4 TCP/UDP session connections, support work modes such as RealCom, Reverse RealCom, TCP Server, TCP Client, UDP Server, UDP Client, Pair Master, Pair Slave, UDP Rang, UDP Multicast, Telnet, Reverse Telnet, RFC2217, Redundant COM, DRDAS RealCom and DRDAS TCP Server
	Electromagnetic isolation strength: 1.5kVDC
Serial Port	Standard: EIA RS-232C, RS-485, RS-422

Quantity of serial port: 16 3IN1 serial ports

RS-232 signal: RXD, TXD, DTR, GND, DSR, RTS, CTS, DCD

RS-485 signal: D+, D-, GND

RS-422 signal: T+, T-, GND, R+, R-

Baud rate: 110bps-921600bps

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

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

Stop bit: 1bit, 1.5bit, 2bit

Interface form: RJ45

Flow control: RTS/CTS, DTR/DSR, XON/XOFF

Direction control: RS-485 direction adopts Automatic Data Direction Control (ADDC)

Load capacity: RS-485/422 end supports 256-node polling environment

Transmission distance: RS-232, 15m; RS-485/422, 1200m

Pull up/down resistance for RS-485: 1kΩ or 150kΩ, controlled by DIP switch

Terminating resistance for RS-485: 120Ω, controlled by DIP switch

Electromagnetic isolation strength: 2kVDC

Console Port	CLI command line management port (RS-232), RJ45
Configuration Method	WEB configuration management, TELNET configuration, Windows configuration tool, SSHD configuration
Security	User right classification, IP address filtering, MAC address filtering, SNMP/ Mail /System Log alarm, HTTP/HTTPS/SSHD/TELNET access control
Indicator	Power supply indicator, Ethernet port indicator, serial port indicator, running indicator
Power Supply	85~265VAC dual power supply redundancy, AC power supply socket with switch
Power Consumption	No-load: 3.8W@220VAC Full-load: 9.2W@220VAC
Working Environment	Operating temperature: -40~75℃ Storage temperature:-40~85℃ Relative humidity: 5%～95%(no condensation)
Physical Characteristic	Housing: IP40 protection, metal Installation: rack mounting

Dimension (W x H x D): 440mm×44mm×197.4mm

Weight: 2.41kg

Industrial Standard	IEC61000-4-2 (ESD, electronic static discharge), Level 4 ● Air discharge:± 15kV ● Contact discharge: ±8kV IEC 61000-4-4 (EFT, electrical fast transient), Level 4 ● Power supply: ±4kV ● Ethernet port: ±2kV ● Serial port: ±2kV IEC 61000-4-5 (Surge), Level 4 ● Power supply: common mode±4kV, differential mode±2kV ● Network port: common mode±4kV, differential mode±2kV ● Serial port: common mode±4kV, differential mode±2kV 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	3IN1 (RS-232/485/422)	Power Supply
NP6100-2T-16DI(3IN1)-RJ-2P(85-265VAC)	2	16	85~265VAC, dual power supply

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