



NP5100 Series

Rack Mounting

16/32 RS-232/485/422 3IN1 Safe Serial Server

- Support 16/32 3IN1 serial port to 2 10/100Base-T(X) self-adaptive Ethernet interface
- Support TCP Server, TCP Client, UDP Server, UDP Client and other operating modes
- Support dual power supply 85~265VAC wide voltage input range
- Support -40~ 75°C wide temperature operation
- Support optional OLED display, device information could be configured



Introduction

NP5100 series are the safe serial networking 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 16/32 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, TELNET, ARP, ICMP, HTTP, HTTPS, SMTP, SNTP, 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 TCP Server, TCP Client, UDP Server, UDP Client 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. It can provide users with good experience with friendly design of network management system interface, simple and convenient operation.

This product supports optional OLED display, which could conduct IP address configuration without using external device. The SD card design of this device can achieve software upgrade. 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

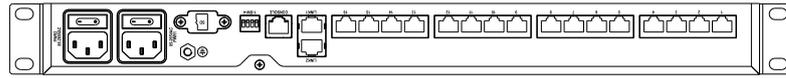
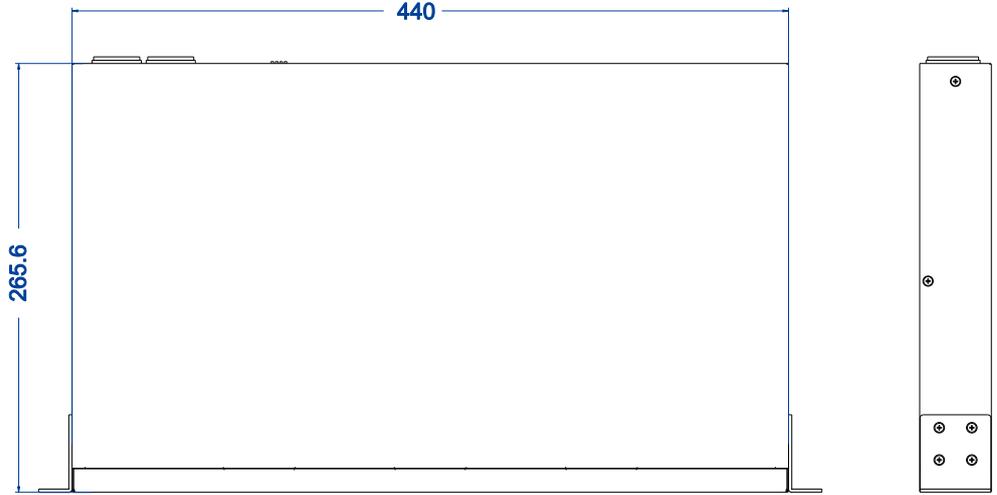
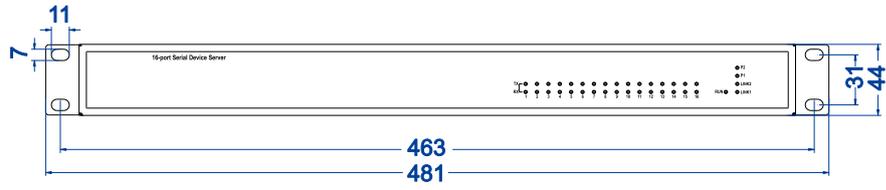
- ⦿ Support 2 10/100Base-T(X) self-adaptive Ethernet interfaces and provide dual IP and MAC addresses to meet the requirements of multi-network management or network backups
- ⦿ Support 300bps-115200bps line speed and non-blocking communication
- ⦿ Support TCP Server, TCP Client, UDP Server, UDP Client and other operating modes
- ⦿ Support OLED display that could configure device IP address
- ⦿ 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 error information 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, TELNET, SSHD and WEB
- ⦿ SSHD and HTTPS configuration 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 prevent communication interrupt caused by the switch and router aging the MAC address of serial server

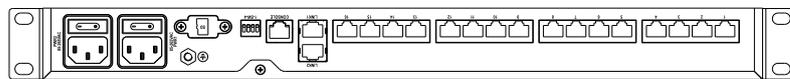
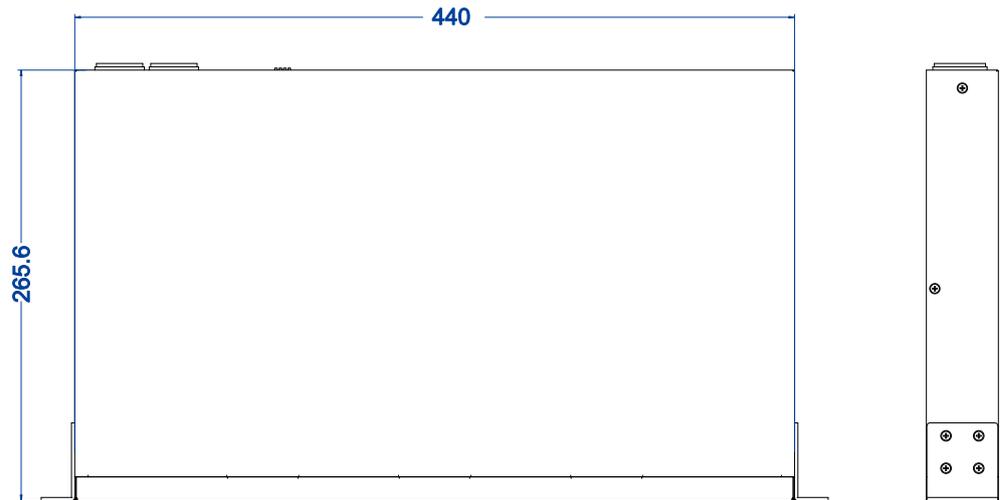
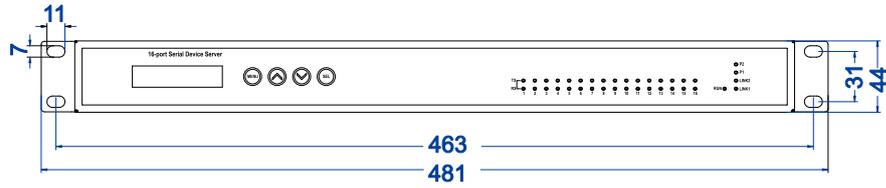
Dimension

Unit:mm

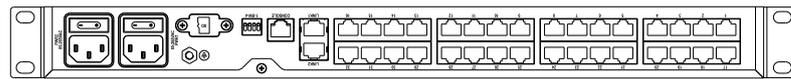
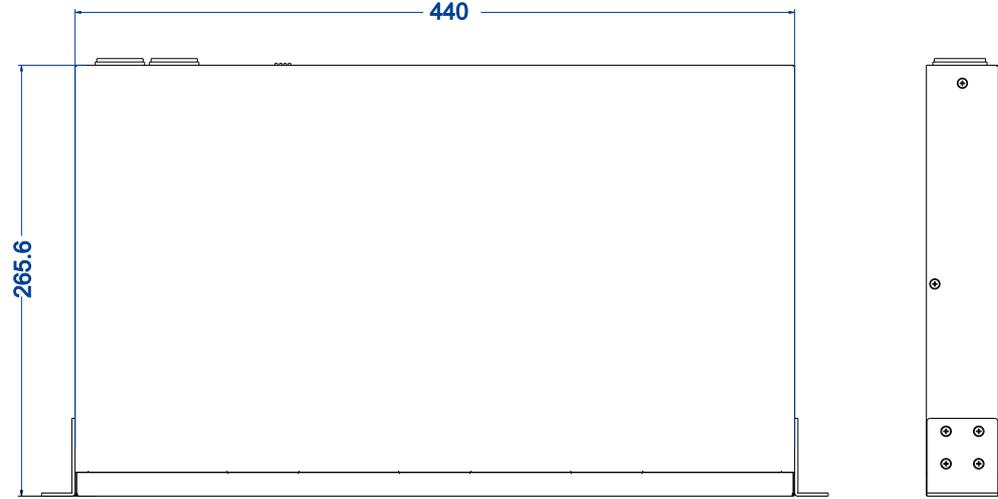
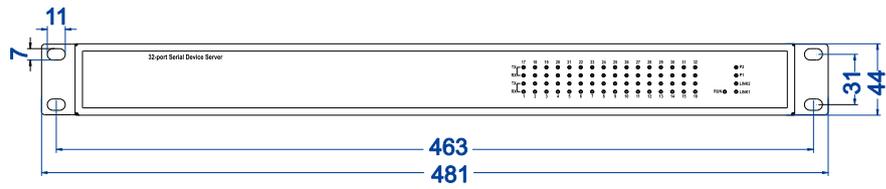
- NP5100-2T-16DI (3IN1) -RJ



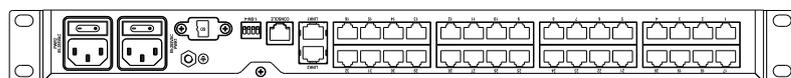
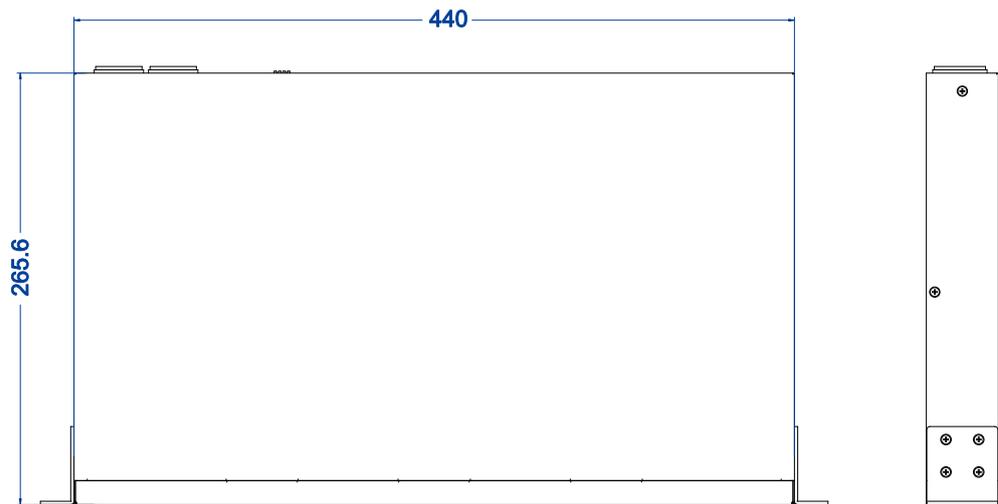
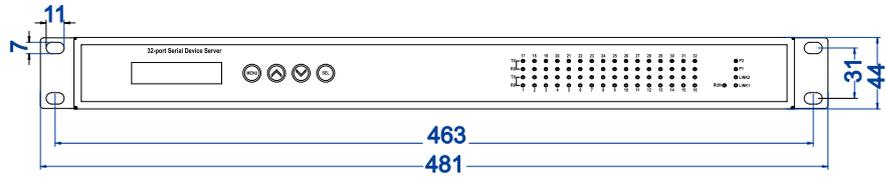
- NP5100-2T-16DI (3IN1) -RJ-OLED



- NP5100-2T-32DI (3IN1) -RJ

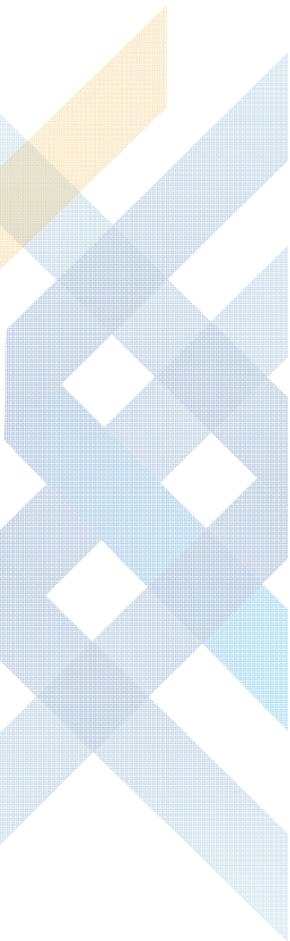


● NP5100-2T-32DI (3IN1) -RJ-OLED

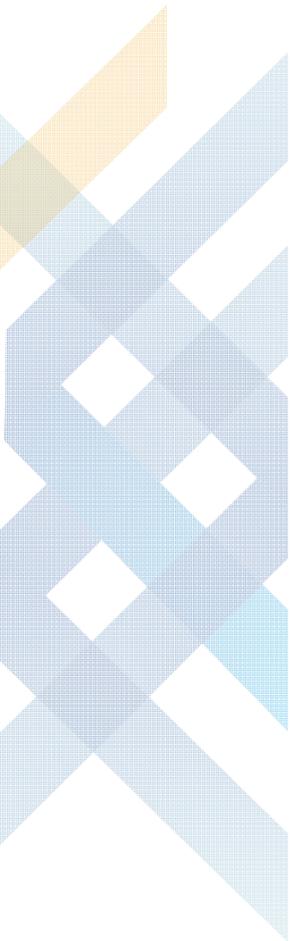


Specification

<p>Ethernet</p>	<p>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 Autotuning Interface form: RJ45 Interface quantity: 2 Duplex mode: Full/Half Duplex Mode Self-adaptive Work mode: 4 sessions, support work modes such as TCP Server, TCP Client, UDP Server and UDP Client</p>
<p>Serial Port</p>	<p>Standard: EIA RS-232C, RS-485, RS-422 Quantity of serial port: 16/32 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: 300~115200bps 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 32 points polling (customizable 128 points) Transmission distance: RS-232, 15m; RS-485/422, 1200m Pull high/low resistor for RS-485: 4.7kΩ Electromagnetic isolation strength: 1kVDC</p>
<p>Console port</p>	<p>CLI command line management port (RS-232), RJ45</p>
<p>Configuration Method</p>	<p>WEB configuration management, TELNET configuration, Windows configuration tool, SSHD configuration</p>
<p>Security</p>	<p>Classification of User Permissions, IP address filtering, MAC address filtering, HTTP/HTTPS console, TELNET console</p>
<p>Indicator</p>	<p>Power supply indicator, Ethernet port indicator, serial port indicator, running indicator</p>
<p>Power Supply</p>	<p>85~265VAC dual power supply redundancy, AC power supply socket</p>



	with switch
Power Consumption	No-load: 5.6W@220VAC Full-load: 13.2W@220VAC
Working environment	Operating temperature: -40~75°C Storage temperature:-40~85°C Relative humidity: 5%~95%(no condensation)
Physical Characteristic	Housing: IP40 protection, metal Installation: rack mounting Dimension (W x H x D): 440mm×44mm×265.6mm Weight: 3.04kg
Industrial Standard	IEC 61000-4-2 (ESD, electrostatic discharge), Level 4 <ul style="list-style-type: none"> ● Air discharge: ±15kV ● Contact discharge: ±8kV IEC 61000-4-4 (EFT, electrical fast transient), Level 4 <ul style="list-style-type: none"> ● Power supply: ±4kV ● Ethernet port: ±2kV ● Serial port: ±2kV IEC 61000-4-5 (Surge), Level 4 <ul style="list-style-type: none"> ● 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
Certification	CE, FCC, RoHS
Warranty	3 years



Ordering Information

Available Models	100M Copper port	3IN1(RS-232 /485/422)	OLED Display	Power Supply
NP5100-2T-32DI(3IN1)-RJ-OLED	2	32	1	85~265VAC dual power supply
NP5100-2T-32DI(3IN1)-RJ	2	32	-	
NP5100-2T-16DI(3IN1)-RJ-OLED	2	16	1	
NP5100-2T-16DI(3IN1)-RJ	2	16	-	



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