

NPort 5400 Series

World's Leading LCM Display Serial Device Servers

Features

- Easy-to-use LCM (Liquid Crystal Module) interface for IP address configuration
- Auto-detecting 10/100 Mbps Ethernet
- 4 ports with RS-232 or RS-422/485 interface
- Surge protection for all serial signals (15 KV ESD)
- Supports TCP Server, TCP Client, UDP, and Real COM Modes
- Supports web, telnet console
- Supports SNMP MIB-II for network management
- NPort 5430I has 2 KV isolation protection



Make Up to 4 RS-232 or RS-422/485 Serial Devices Internet Ready

The NPort 5400 Series provides a convenient and transparent way to connect serial devices to an Ethernet, with basic configuration all that's needed to network your existing serial devices. Protect your current hardware investment, but also ensure future network expandability. NPort 5400 Series can

transparently transmit data bi-directionally between the serial and Ethernet interfaces. You can simultaneously centralize your serial device management and distribute management hosts over the network.

Easy-to-use Serial Device Server

The built-in LCM human-machine interface displays all configuration parameters, and includes 4 buttons for inputting data or selecting the operation mode, making it easy to set up server parameters, including IP address, netmask, and gateway

address. Furthermore, you can also use the Windows utility to monitor server status and data transmission, eliminating the need to prepare additional PCs to console the NPort 5400 for monitoring purposes.

Real COM/TTY Port

The NPort 5400 Series works like an add-on multiport serial board to the Windows host, but with one major advantage—the TCP/IP network. With NPort's Real COM/TTY drivers, the serial ports on NPort 5400 Series products are recognized as

Real COM ports by the Windows operating system, or Real TTY ports by Linux environments. Basic transmit/receive data functions are provided, as well as RTS, CTS, DTR, DSR, and DCD.

4 Independent Serial Ports Can be Configured for Different Operation Modes

Versatile operation is ensured since different modes can be used for different serial ports. NPort 5400 Series products are suitable for connecting different devices for remote data polling, event handling, or data multicasting via the TCP/IP

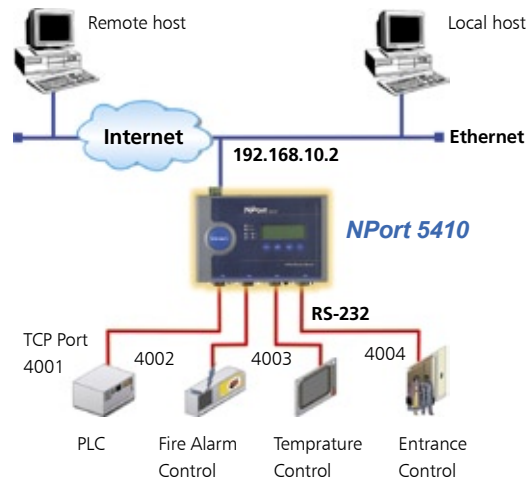
network. For example, you can configure NPort 5400's port 1 for driver mode, port 2 for TCP server mode, and ports 3 and 4 for TCP client mode.

4-Port RS-232 and RS/422/485 Serial Device Servers

Typical Applications

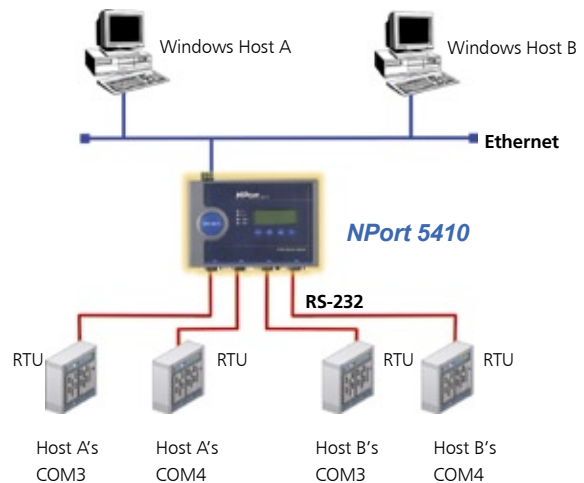
Use only one IP address to control multiple serial devices over the Internet

To establish automatic or remote data acquisition, NPort 5400 series products can connect up to 4 serial devices with only one IP address. By specifying the IP address and the TCP port number, a host computer can access different serial devices over the Internet. For example, connect to 192.168.10.2:4001 to access data from NPort 5410's first serial port.



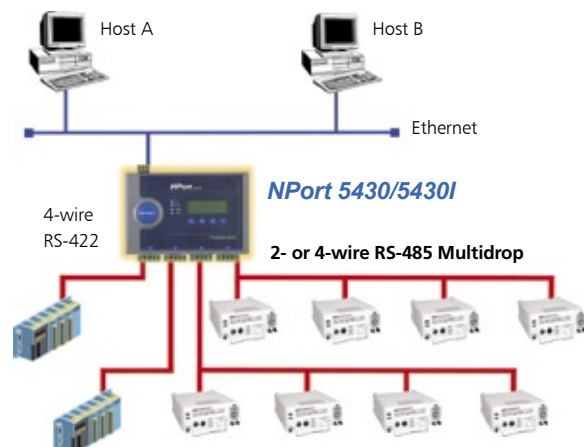
Server sharing extends flexibility by allowing serial device management from a centralized location

Different host computers can share the same NPort 5400 to control different devices. For example, NPort 5410's ports 1 and 2 can be configured to Host A's COM3 and COM4, and NPort 5410's ports 3 and 4 can be configured for Host B's COM3 and COM4.

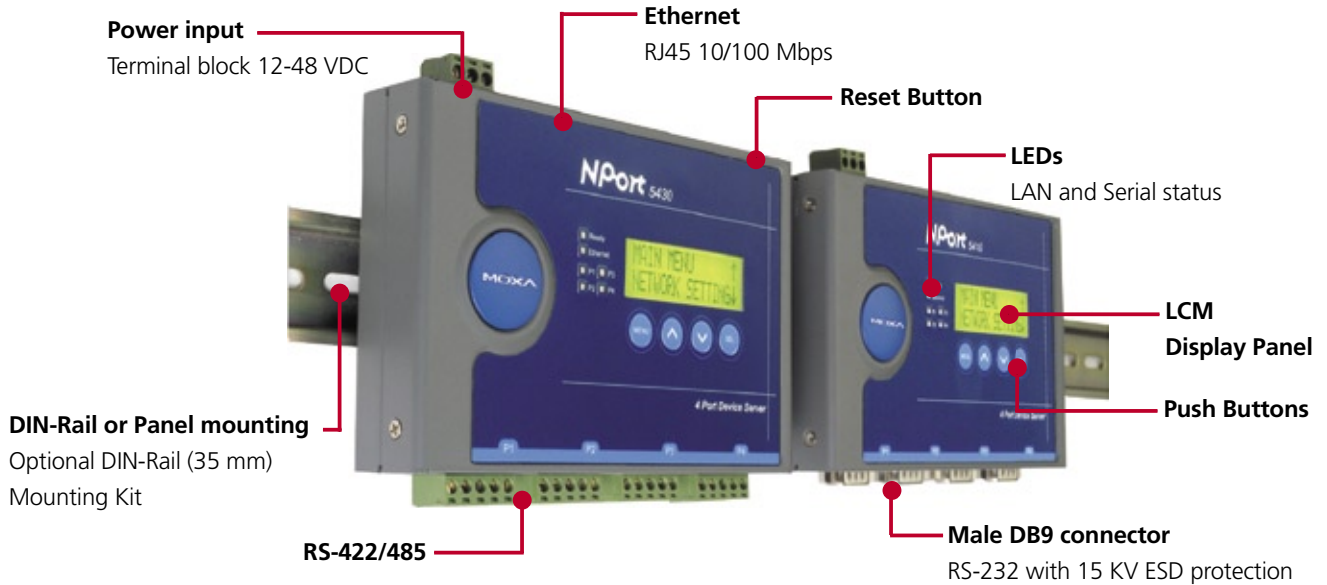


Centralize RS-422/485 serial device control

Up to 31 RS-485 (2-wire or 4-wire) devices or up to 9 RS-422 (4-wire) devices can be connected via Ethernet with just one of NPort 55430/5430I's serial ports. Use the Web console or NPort 5000 Series Windows utility to configure each serial port for either RS-422 or RS-485.



NPort 5400 Series Appearance



Specifications

LAN

Ethernet: 10/100 Mbps, RJ45

Protection:

Built-in 1.5 KV magnetic isolation

Serial

Interface:

NPort 5410: RS-232, male DB9: TxD, RxD, RTS, CTS, DTR, DSR, GND, DCD

NPort 5430, NPort 5430I:

RS-422: Tx+, Tx-, Rx+, Rx-, GND

RS-485 (4-wire): Tx+, Tx-, Rx+, Rx-, GND

RS-485 (2-wire): Data+, Data-, GND

Serial line protection: 15 KV ESD for all signals;

2 KV Isolation for NPort 5430I

Power Line protection: 1 KV Burst (EFT), EN61000-4-4;

0.5 KV Surge, EN61000-4-5

RS-485 data direction: Patented Automatic Data Direction Control (ADDC™)

Built-in HMI LCM display with four push buttons

Built-in Buzzer

Built-in Real Time Clock

Built-in Watch Dog Timer

Serial Communication Parameters

Parity: None, Even, Odd, Space, Mark

Data bits: 5, 6, 7, 8

Stop bits: 1, 1.5, 2

Flow control: RTS/CTS, XON/XOFF

Speed: 50 bps to 230.4 Kbps

Software Features

Protocols: ICMP, IP, TCP, UDP, DHCP, BootP, Telnet, DNS, SNMP, HTTP, SMTP, SNTF

Utilities: NPort Administrator for Windows 95/98/ME/NT/2000/XP/2003

Real COM/TTY Drivers: Windows 95/98/ME/2000/XP, Real COM drivers, Linux real TTY driver

Configuration: Web browser, Telnet console, or Windows utility

Power Requirements

Power Input: 12 to 48 VDC

Power Consumption:

5410: 385 mA (at 12V max.)

5430: 380 mA (at 12V max.)

5430I: 600 mA (at 12V max.)

Mechanical Specifications

Material: SECC sheet metal (0.8 mm)

Gross Weight:

5410: 0.5 kg (1.10 lb)

5430: 0.5 kg (1.10 lb)

5430I: 0.5 kg (1.10 lb)

Environmental

Operating Temperature: 0 to 55°C (32 to 131°F), 5 to 95% RH

Storage Temperature: -20 to 85°C (-4 to 185°F), 5 to 95% RH

Agency Approvals

EMC: FCC Class A, CE Class A

Safety: UL, CUL, TÜV

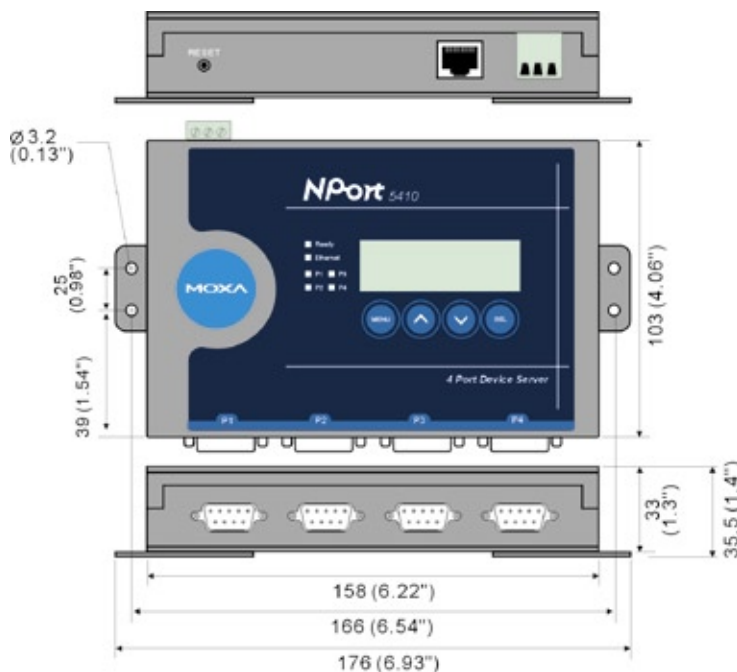
4-Port RS-232 or RS-422/485 Serial Device Server

Easy Installation with the User-Friendly LCM Display Panel

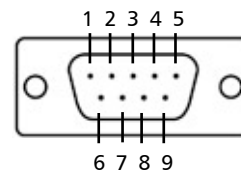
NPort 5400 Series products have 4 push buttons for inputting data, configuration, and selecting the operation mode. The LCM display panel first shows the "Server Name," "Serial Number," and "IP Address." Use the LCM display panel and push buttons to configure the IP address, netmask, gateway, as well as all other parameters quickly and easily.



Dimensions



Pin Assignment



PIN	RS-232
1	DCD (in)
2	RxD (in)
3	TxD (out)
4	DTR (out)
5	GND
6	DSR (in)
7	RTS (out)
8	CTS (in)
9	--

Ordering Information

NPort 5410: 4-Port RS-232 Serial Device Server

NPort 5430: 4-Port RS-422/485 Serial Device Server

NPort 5430I: NPort 5430 with 2 KV isolation

All Items include

- 4-port serial device server
- Quick Installation Guide
- NPort Documentaion and Software CD-ROM
- Power adaptor or DIN-Rail Power Supplies are optional accessories.

Optional Accessories

DK-35A: DIN-Rail Mounting Kit (35 mm)

DIN-Rail Power Supply: See page 9-5 for more detailed information.

Power Adaptor: See page 9-6 for more detailed information.