

NPort 5200 Series

2-Port Universal Serial Device Servers

Features

- Make your serial devices Internet ready
- Versatile socket operation modes, including TCP Server, TCP Client, UDP
- Easy-to-use Windows Utility for mass installation
- Cigarette pack size
- 10/100 Mbps Ethernet
- 2- or 4-wire RS-485 with patented Automatic Data Direction Control (ADDC™)
- Built-in 15 KV ESD protection for all serial signals
- Supports SNMP MIB-II for network management



❖ Connect Serial Devices to Ethernet

NPort 5200 Series serial device servers are designed to make your industrial serial devices Internet ready instantly. The compact size of the NPort 5200 device servers makes them the ideal choice for connecting your RS-232 or RS-422/485

serial devices, such as PLCs, meters, and sensors, to an IP-based Ethernet LAN, making it possible for your software to access serial devices located anywhere on a local LAN, or the Internet.

❖ Standard TCP/IP Interface and Versatile Operation Modes

NPort 5200 Series serial device servers provide TCP Server, TCP Client, and UDP, ensuring the compatibility of network

software that uses a standard network API (Winsock, BSD Sockets).

❖ Real COM/TTY Drivers for Existing Software

Thanks to NPort's Real COM/TTY drivers, software that works with COM/TTY ports can now work on a TCP/IP network in no time. This excellent feature preserves your software

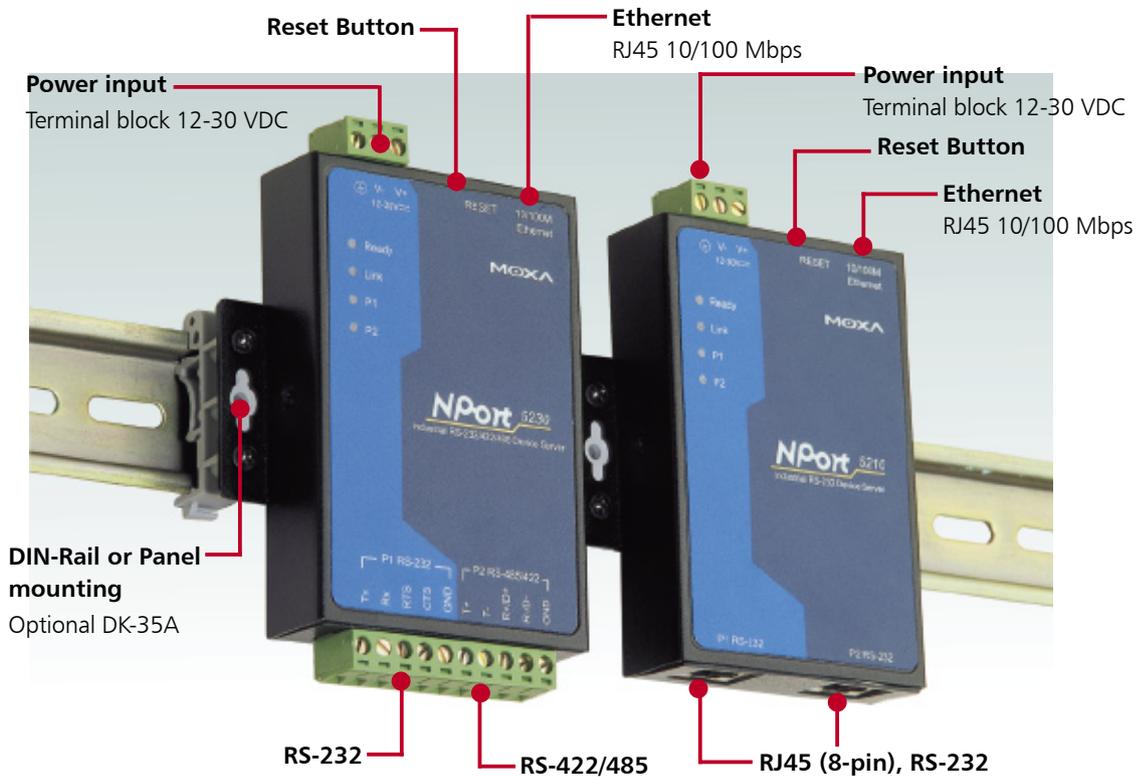
investment and lets you enjoy the benefits of networking your serial devices instantly.

❖ Easy installation and configuration

NPort 5200 Series serial device servers support automatic IP configuration protocols (DHCP, BootP) and manual configuration through the Web Console, Telnet Console, Serial Console and Utility. Both methods ensure quick and effective installation. And

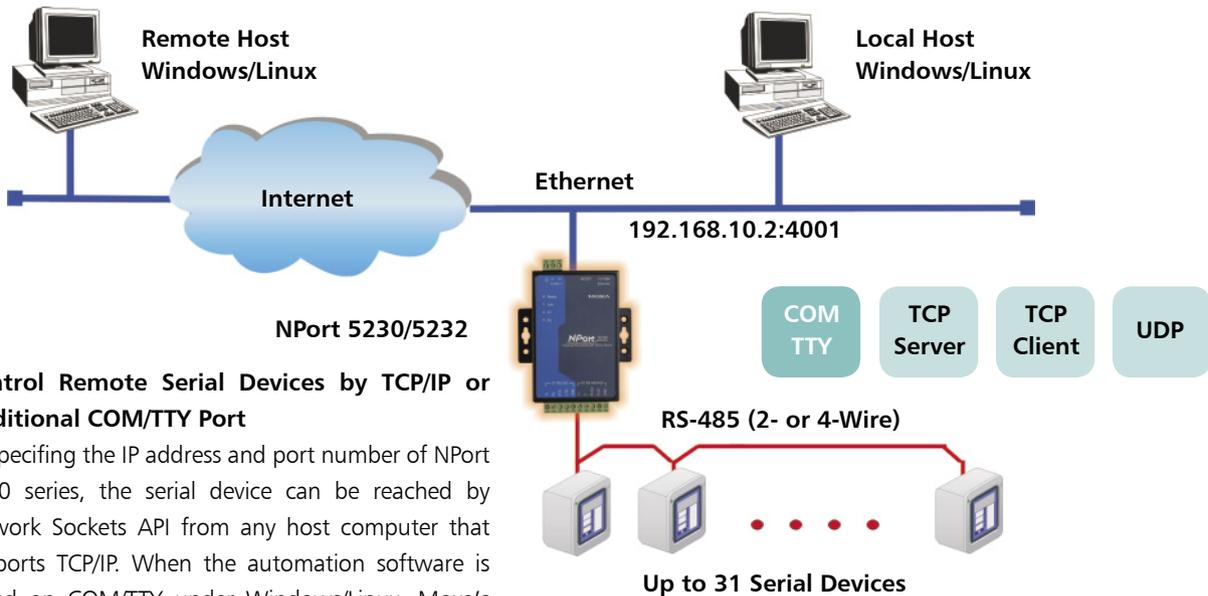
with NPort 5200's Windows Utility, your installation job becomes more pleasant than ever, since all system parameters can be stored and copied to many other device servers.

2-Port Universal Serial Device Servers



Typical Application

COM-Driver/Network-Sockets mode



Control Remote Serial Devices by TCP/IP or Traditional COM/TTY Port

By specifying the IP address and port number of NPort 5200 series, the serial device can be reached by network Sockets API from any host computer that supports TCP/IP. When the automation software is based on COM/TTY under Windows/Linux, Moxa's COM/TTY driver allows legacy software to work seamlessly over the Internet.

Specifications

LAN

Ethernet: 10/100 Mbps, RJ45

Protection: Built-in 1.5 kV magnetic isolation

NPort 5210 Serial Interface

2 RS-232 ports, RJ45 (8-pin)

RS-232 Signals: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

NPort 5230 Serial Interface

1 RS-232 port

1 RS-422/485 port

RS-232 Signals: TxD, RxD, RTS, CTS, GND

NPort 5230/5232/5232I RS-422/485 Interface

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

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

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

RS-485 Data Direction:

Patented Automatic Data Direction Control (ADDC™)

Serial Line Protection: 15 kV ESD for all signals

Power Line protection:

4 kV Burst (EFT), EN61000-4-4

2 kV Surge, EN61000-4-5

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 Bit: 1, 1.5, 2

Flow Control: RTS/CTS

(only for RS-232 port), XON/XOFF

Speed: 50 bps to 230.4 Kbps

Software Features

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

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

Real COM/TTY Drivers: Windows 95/98/ME/NT/2000/XP/2003 COM driver, Linux real TTY driver

Configuration: Web browser, Telnet console, Windows utility, or Serial console (5210/5230)

Power Requirements

Power Input: 12 to 30 VDC

Power Consumption:

5210: 305 mA at 12V (max.)

5230: 315 mA at 12V (max.)

5232: 274 mA at 12V (max.)

5232I: 365 mA at 12V (max.)

Mechanical Specifications

Material: Aluminum (1 mm)

Gross Weight:

5210: 0.135 kg (0.30 lb)

5230: 0.140 kg (0.31 lb)

5232: 0.119 kg (0.26 lb)

5232I: 0.157 kg (0.35 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

Regulatory Approvals

EMC: FCC Class A, CE Class A

Safety: UL, CUL, TÜV

Ordering Information

NPort 5210: 2-port RS-232 serial device server

NPort 5230: 1-port RS-422/485 and 1-port RS-232 serial device server

NPort 5232: 2-port RS-422/485 serial device server

NPort 5232I: 2-port RS-422/485 serial device server with 2 kV isolation

All Items Include

- 1 serial device server
- Quick Installation Guide
- NPort Documentation and Software CD-ROM
- * Power adaptor, DIN-Rail Power Supplies, and RJ45 to DB9 or DB25 serial cable are optional accessories

Optional Accessories

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

DIN-Rail Power Supply: See page 7-5 for more detailed information

Power adaptor: See page 7-6 for more detailed information

CBL-RJ45M9-150: RJ45 (8-pin) to DB9 Male cable, 150 cm

CBL-RJ45F9-150: RJ45 (8-pin) to DB9 Female cable, 150 cm

CBL-RJ45M25-150: RJ45 (8-pin) to DB25 Male cable, 150 cm

CBL-RJ45F25-150: RJ45 8-pin to DB25 Female cable, 150 cm

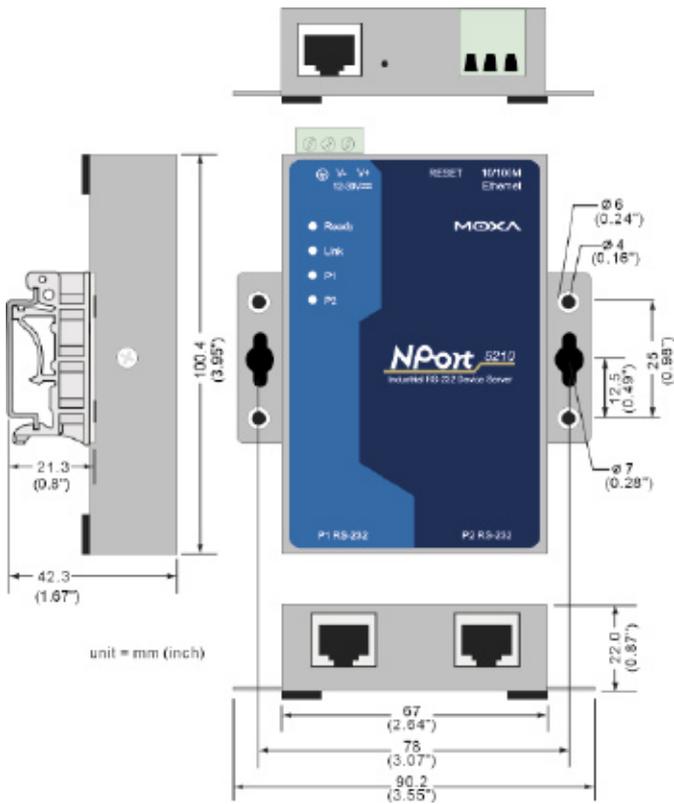
* See page 7-4 for more detailed information



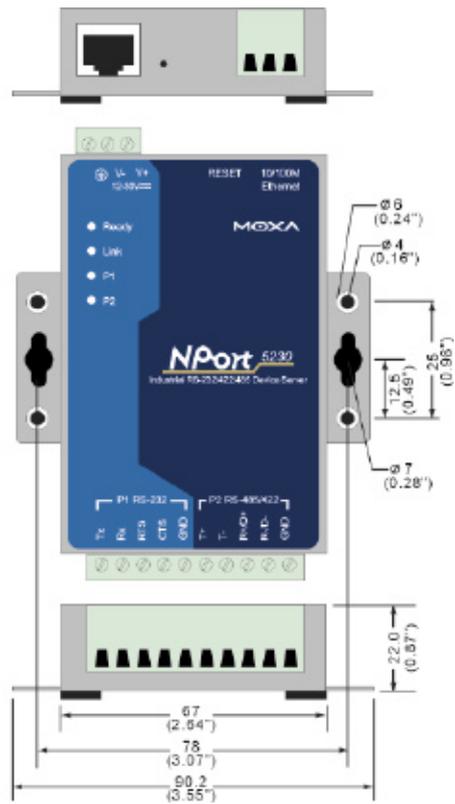
DK-35A

Dimensions and Appearance

NPort 5210

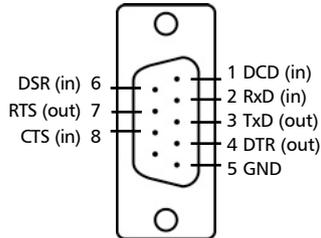


NPort 5230/5232

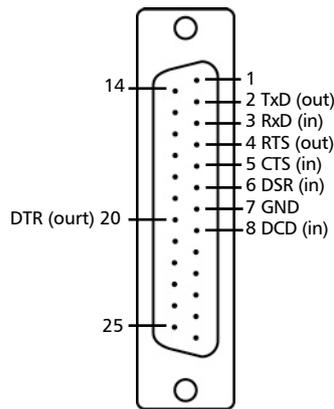


Pin Assignment

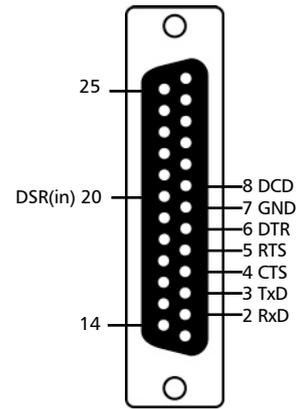
CBL-RJ45M9-150



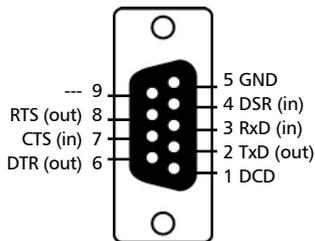
CBL-RJ45M25-150



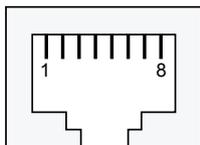
CBL-RJ45F25-150



CBL-RJ45F9-150



RJ45 RS-232 port pin assignment



PIN	RS-232
1	DSR (in)
2	RTS (out)
3	GND
4	TxD (out)

PIN	RS-232
5	RxD (in)
6	DCD (in)
7	CTS (in)
8	DTR (out)