

# NPort 5200 Series

## 2-Port 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 (ADDCTM)
- 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

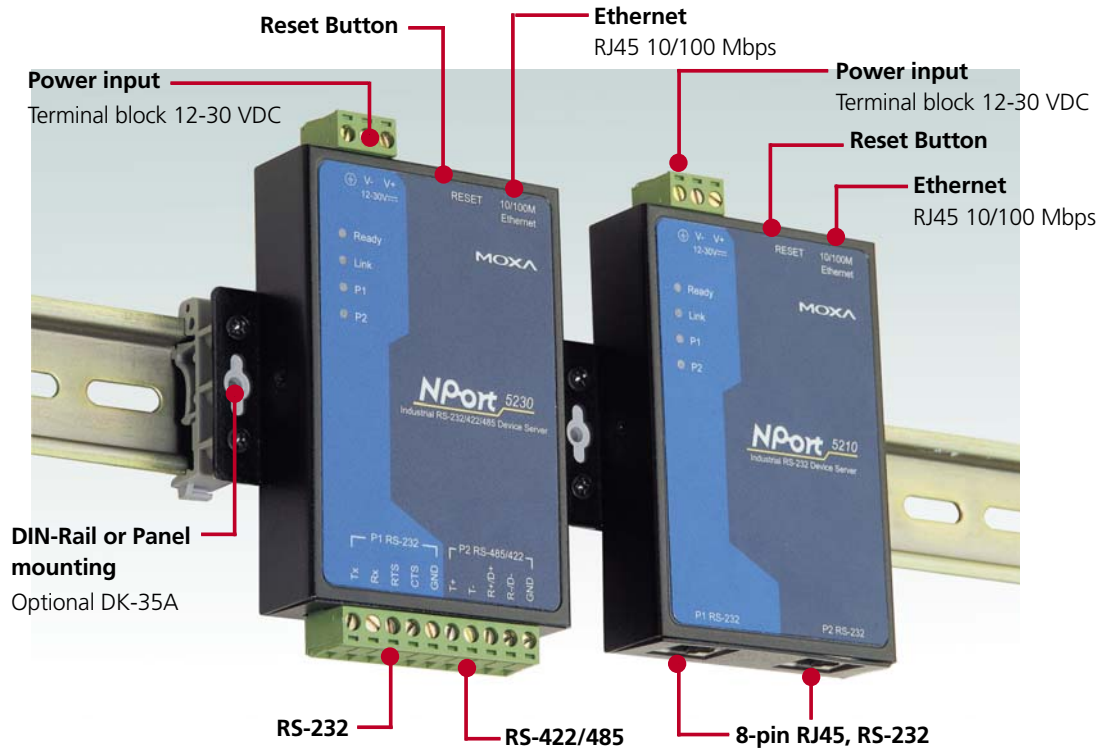
and lets you enjoy the benefits of networking your serial devices instantly.

### 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. All methods ensure quick and effective

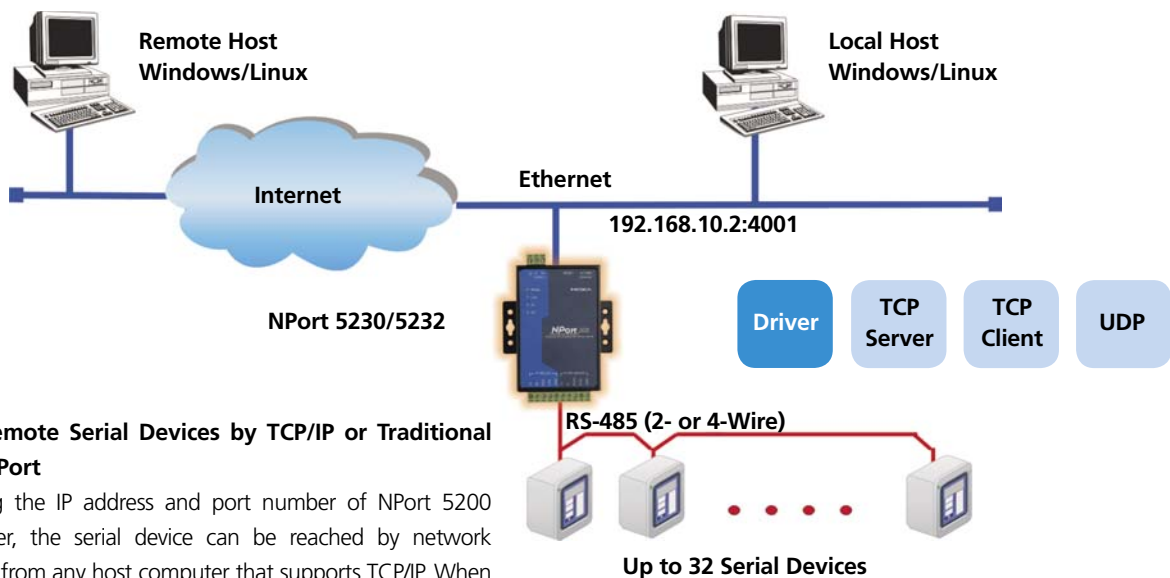
installation. And with NPort 5200's Windows Utility, your installation job becomes more pleasant than ever, since all system parameters can be stored and copied to many other device servers.

## 2-Port 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 device server, 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, 8-pin RJ45

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 (ADDCTM)

**Serial Line Protection:** 15 KV ESD for all signals

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

0.5 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:** 110 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/NT/2000/XP/2003 COM driver, Linux real TTY driver

**Configuration:** Web browser, Telnet console, Windows utility, or Serial console (NPort 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:** 275 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

-40 to 75°C (-40 to 167°F), for -T model

**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:** 2-port serial device server; 1 port for RS-232, 1 port for RS-422/485

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

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

**NPort 5210-T:** 2-port RS-232 serial device server, -40 to 75°C operation temperature

### 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 9-5 for more information

**Power adaptor:** See page 9-6 for more detailed information

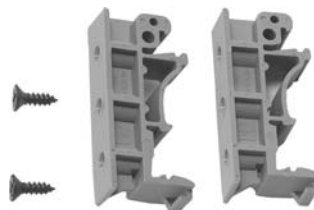
**CBL-RJ45M9-150:** 8-pin RJ45 to male DB9 cable, 150 cm

**CBL-RJ45F9-150:** 8-pin RJ45 to female DB9 cable, 150 cm

**CBL-RJ45M25-150:** 8-pin RJ45 to male DB25 cable, 150 cm

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

\* See page 9-4 for more information

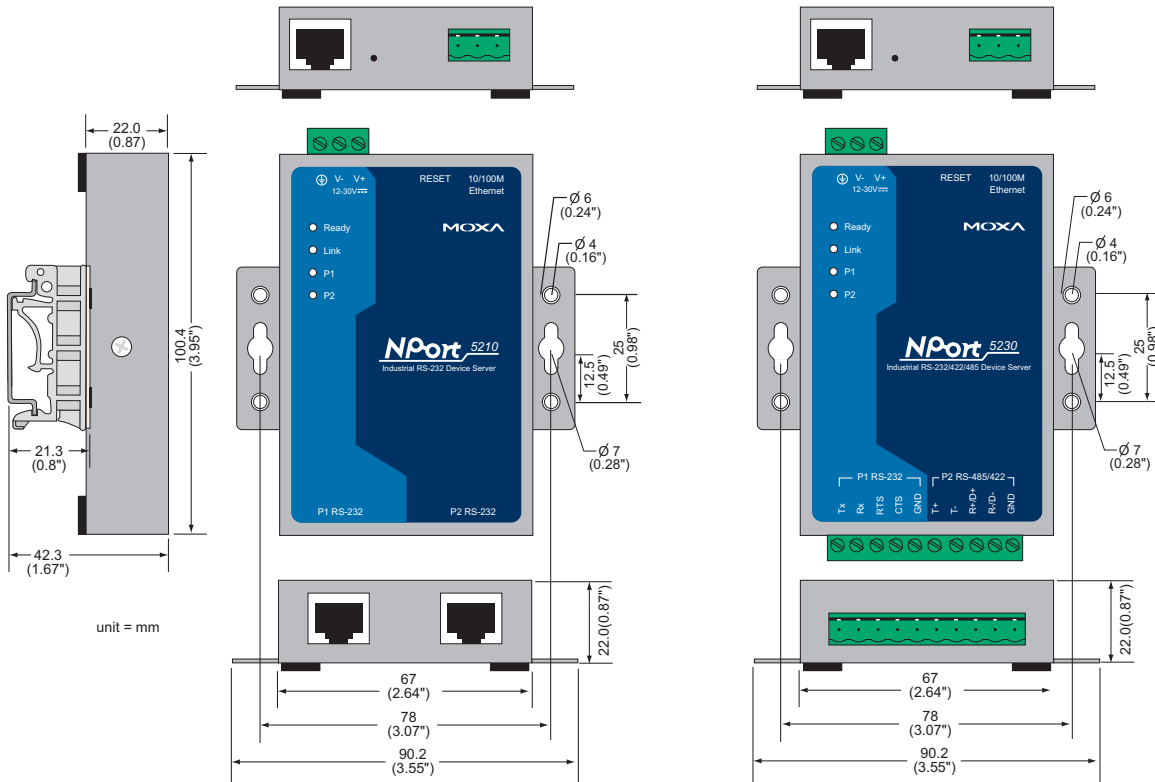


DK-35A

## Dimensions

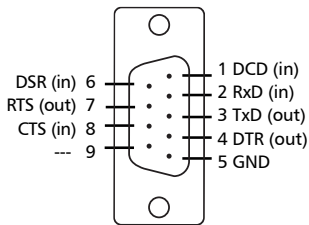
### NPort 5210

### NPort 5230/5232

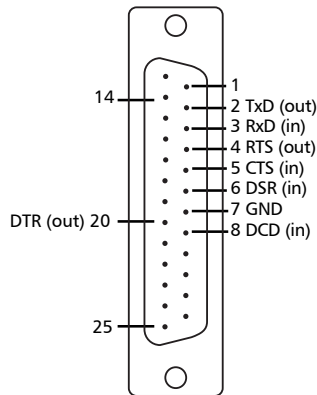


## Ping Assignment

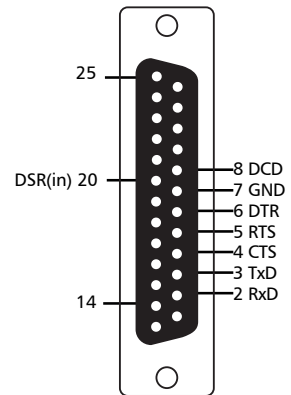
### CBL-RJ45M9-150



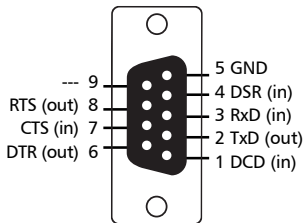
### CBL-RJ45M25-150



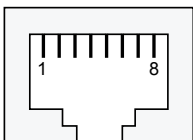
### CBL-RJ45F25-150



### CBL-RJ45F9-150



## RJ45 RS-232 port pin assignment



PIN	Signals
1	DSR (in)
2	RTS (out)
3	GND
4	TxD (out)

PIN	Signals
5	RxD (in)
6	DCD (in)
7	CTS (in)
8	DTR (out)