



# NPort 5200A Series Quick Installation Guide

First Edition, July 2010

## 1. Overview

NPort 5200A series device servers are compact, palm-sized data communication devices that allow you to control RS-232 (NPort 5210A), RS-422/485 (NPort 5230A), and RS-232/422/485 (NPort 5250A) serial devices over a TCP/IP-based Ethernet.

**Note:** “-T” indicates an extended temperature model.

## 2. Package Checklist

Before installing the NPort 5200A series device server, verify that the package contains the following items:

- 1 NPort 5200A serial device server
- 4 stick-on pads
- Document & Software CD
- Quick Installation Guide
- Product Warranty Statement

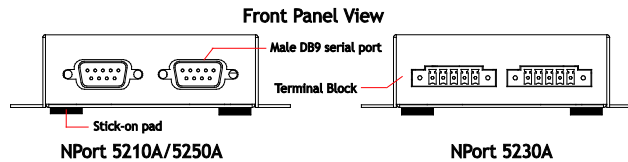
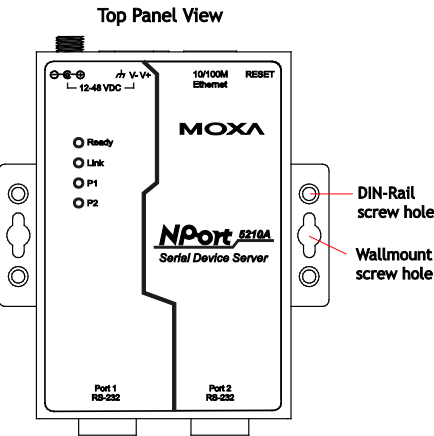
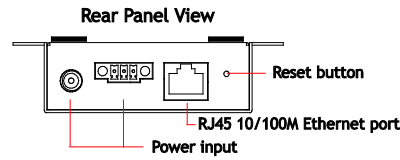
### Optional Accessory

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

Notify your sales representative if any of the above items are missing or damaged.

## 3. Hardware Introduction

As shown in the following figures, NPort 5200A series device servers have two male DB9 ports for transmitting RS-232 (NPort 5210A), or RS-232/422/485 (NPort 5250A) serial data and have two 5-pin terminal block ports for transmitting RS-422/485 (NPort 5230A).

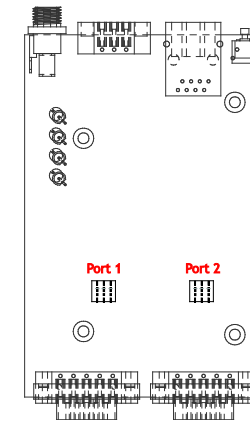


**Reset Button**—*Press and hold the Reset button for 5 seconds to load factory defaults:* Use a pointed object, such as a straightened paper clip or toothpick, to depress the reset button. This will cause the Ready LED to blink on and off. The factory defaults will be loaded once the Ready LED stops blinking (after about 5 seconds). At this point, release the reset button.

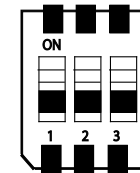
**LED Indicators**—NPort 5200A’s top panel has four LED indicators, which are described in the following table.

LED Name	LED Color	LED Function
Ready	Red	Steady on: Power is on and the NPort is booting up.
		Blinking: Indicates an IP conflict, or DHCP or BOOTP server is not responding properly.
	Green	Steady on: Power is on and the NPort is functioning normally.
	Off	Blinking: The NPort has been located by the NPort Administrator’s Location function.
Link	Orange	Power is off, or a power error..
	Green	10 Mbps Ethernet connection.
	Off	100 Mbps Ethernet connection.
P1, P2	Orange	Ethernet cable is disconnected.
	Green	Serial port is receiving data.
	Off	Serial port is transmitting data.
	Off	No data is being transmitted or received through the serial port.

### Adjustable pull high/low resistor and terminator for RS-422/485



Remove the NPort 5230A/5250A’s top cover and you will find DIP switches to adjust each serial port’s pull-high, pull-low, and terminator. Do not use the 1 K $\Omega$  setting with RS-232 mode, as doing so will degrade the RS-232 signals and shorten the communications range.



SW	1	2	3
ON	Pull-high resistor	Pull-high resistor	Terminator
OFF	1 K $\Omega$	1 K $\Omega$	120 $\Omega$
	*150 K $\Omega$	*150 K $\Omega$	*---

\*Default

P/N: 1802052000010

## 4. Hardware Installation Information

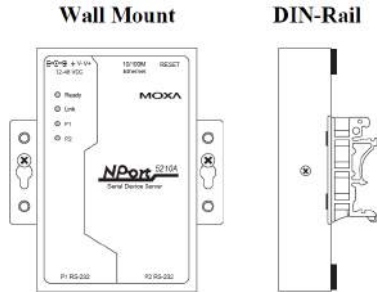
**STEP 1:** After removing the NPort 5200A series device server from the box, connect the NPort 5200A series device server to a network. Use a standard straight-through Ethernet cable to connect to a hub or switch. When setting up or testing the NPort 5200A series device server, you might find it convenient to connect directly to your computer's Ethernet port. In this case, use a cross-over Ethernet cable.

**STEP 2:** Connect the NPort 5200A series device server's serial port to a serial device.

**STEP 3:** Connect the power adaptor.

**STEP 4:** Placement options.

In addition to placing the NPort 5200A on a desktop or other horizontal surface, you may also make use of the DIN-Rail or Wall Mount options, as illustrated below.



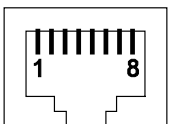
## 5. Software Installation Information

To install **NPort Administration Suite**, insert the **NPort Document & Software CD** into your computer's CD-ROM drive. Once the **NPort Installation CD** window opens, click on the **Software** folder, and then follow the instructions on the screen.

To view detailed information about **NPort Administration Suite**, click on the **Documents** folder, and then select "NPort 5200A Series User's Manual" to open the pdf version of the user's guide.

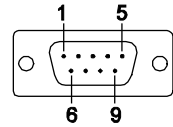
## 6. Pin Assignments

### Ethernet Port Pinouts



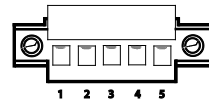
Pin Number	Ethernet
1	Tx+
2	Tx-
3	Rx+
6	Rx-

### NPort 5210A—DB9 male (RS-232) port pinouts



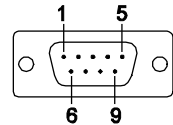
Pin Number	RS-232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	---

### NPort 5230A—Terminal Block (RS-422/485) port pinouts



Pin Number	RS-422/485 (4W)	RS-485 (2W)
1	TxD+(B)	---
2	TxD-(A)	---
3	RxD+(B)	Data+(B)
4	RxD-(A)	Data-(A)
5	GND	GND

### NPort 5250A—DB9 male (RS-232/422/485) port pinouts



Pin Number	RS-232	RS-422/485 (4W)	RS-485 (2W)
1	DCD	TxD-(A)	---
2	RxD	TxD+(B)	---
3	TxD	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	Data-(A)
5	GND	GND	GND
6	DSR	---	---
7	RTS	---	---
8	CTS	---	---
9	---	---	---

## 7. Specifications

### Power Requirements

Power Input	12 to 48 VDC
Power Consumption	119 mA@12V, 65 mA@24V

**Operating Temperature** 0 to 60°C (32 to 140°F), for standard models  
-40 to 75°C (-40 to 167°F), for -T models

### Operating Humidity

5 to 95% RH

### Dimensions

100 x 111 x 26 mm	← with ears
(3.94 x 4.37 x 1.02 in)	
77 x 111 x 26 mm	← without ears
(3.03 x 4.37 x 1.02 in)	

### Serial Line Protection

15 KV ESD for serial port  
Level 1 Surge, EN61000-4-5

### Magnetic Isolation

1.5 KV for Ethernet

### Power Line Protection

Level 2 Burst (EFT), EN61000-4-4  
Level 3 Surge, EN61000-4-5

### Regulatory Approvals

FCC Class A, CE Class A, UL, LVD

**MOXA**

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