

# NPort P5150A Series Quick Installation Guide

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## Overview

NPort P5150A series device servers are compact, palm-sized data communication devices that allow you to control RS-232/422/485 serial devices over a TCP/IP-based Ethernet.

**NOTE** “-T” indicates an extended temperature model.

## Package Checklist

Before installing the NPort P5150A series device server, verify that the package contains the following items:

- 1 NPort P5150A serial device server
- 4 stick-on pads
- Document & Software CD
- Quick Installation Guide
- Product Warranty Statement

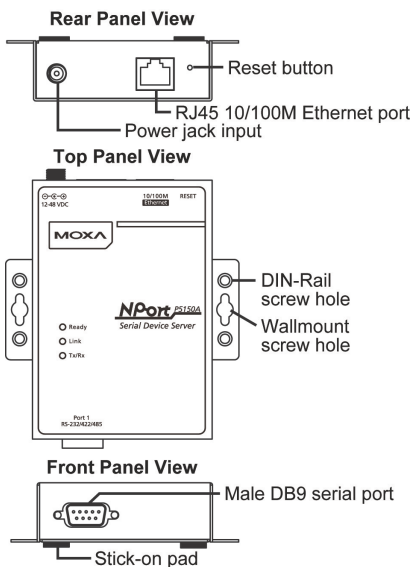
### Optional Accessory

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

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

## Hardware Introduction

As shown in the following figures, NPort P5150A series device servers have one male DB9 port for transmitting RS-232/422/485 serial data.



**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. Once the Ready LED stops blinking (after about 5 seconds), release the reset button and the device server will start to load the factory defaults.



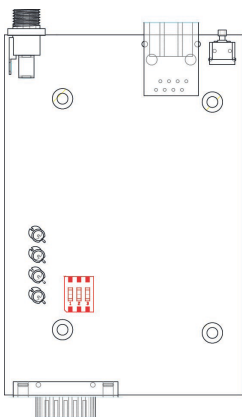
## WARNING

1. The equipment is designed for in-building installation only and is not intended to be connected to exposed (outside plant) networks.
2. This equipment is intended to be used in a Restricted Access Location.
3. This product is intended to be supplied by an UL60950-1 and IEC60950-1 certified Power Unit marked "LPS" and rated output rating: 12 to 48 VDC, 0.18 A minimum, 75°C.

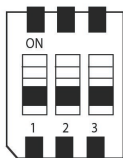
**LED Indicators**—NPort P5150A's top panel has three LED indicators, which are described in the following table.

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.
		Blinking:	The NPort has been located by the NPort Administrator's Location function.
	Off	Power is off, or a power error..	
Link	Orange	10 Mbps Ethernet connection.	
	Green	100 Mbps Ethernet connection.	
	Off	Ethernet cable is disconnected.	
Tx/Rx	Orange	Serial port is receiving data.	
	Green	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-485



Remove the NPort P5150A'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
	Pull-high resistor	Pull-low resistor	Terminator
ON	1 K $\Omega$	1 K $\Omega$	120 $\Omega$
OFF	*150 K $\Omega$	*150 K $\Omega$	*_

\*Default

## Hardware Installation Information

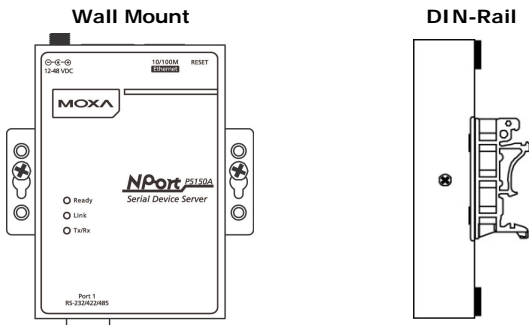
**STEP 1:** After removing the NPort P5150A series device server from the box, if you are not using a PoE switch, the first thing you should do is connect the power adaptor.

**STEP 2:** Connect the NPort P5150A series device server to a network. Use a standard straight-through Ethernet cable to connect to a PoE switch.

**STEP 3:** Connect the NPort P5150A series device server's serial port to a serial device.

**STEP 4:** Placement options.

In addition to placing the NPort P5150A on a desktop or other horizontal surface, you may also make use of the DIN-Rail or Wall Mount options, as illustrated below.



## Software Installation Information

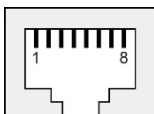
To install **NPort Administration Suite**, insert the **NPort Document & Software CD** into your computer's CD-ROM drive. Once the **NPort Installation CD** window opens, click on the **Software** folder, and then follow the instructions on the screen.

To view detailed information about **NPort Administration Suite**, click on the **Documents** folder, and then select "NPort P5150A Series User's Manual" to open the pdf version of the user's guide.

## Pin Assignments

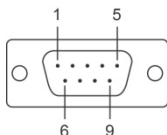
### Ethernet Port Pinouts

Pin No.	Ethernet
1	Tx+
2	Tx-
3	Rx+
6	Rx-



### NPort P5150A—DB9 male (RS-232/422/485) port pinouts

Pin No.	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	—	—	—



## Specifications

Power Requirements	
Power Input	12 to 48 VDC (Supplied by power adapter) or 48 VDC (Supplied by PoE.)
Power Consumption	125 mA @ 12V, 40 mA @ 48 VDC (Supplied by power adapter) 180 mA @ 48V (Supplied by PoE.)
Environmental Limits	
Operating Temperature	Standard Models: 0 to 60°C (32 to 140°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Operating Humidity	5 to 95% RH
Dimensions	
With Ears	100 x 111 x 26 mm (3.94 x 4.37 x 1.02 in)
Without Ears	77 x 111 x 26 mm (3.03 x 4.37 x 1.02 in)
Protection	
Serial Line Protection	Level 2 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 60950-1, EN 60950-1	