

# NPort IA5150/5250 Series Quick Installation Guide

Fourth Edition, September 2008

## 1. Overview

NPort IA device servers deliver easy and reliable serial-to-Ethernet connectivity for the industrial automation market. The servers support several operation modes—TCP Server, TCP Client, UDP, Real COM, Pair Connection, and Ethernet Modem—ensuring the compatibility of network software, and are an ideal choice for connecting RS-232/422/485 serial devices, such as PLCs, sensors, meters, motors, drives, barcode readers, and operator displays. NPort IA device servers come with a compact and rugged DIN-Rail mountable casing.

## 2. Package Checklist

Before installing NPort IA device servers, verify that the package contains the following items:

- 1 NPort IA Series Device Server
- Documentation and Software CD
- NPort IA Series Quick Installation Guide

### Optional Accessories

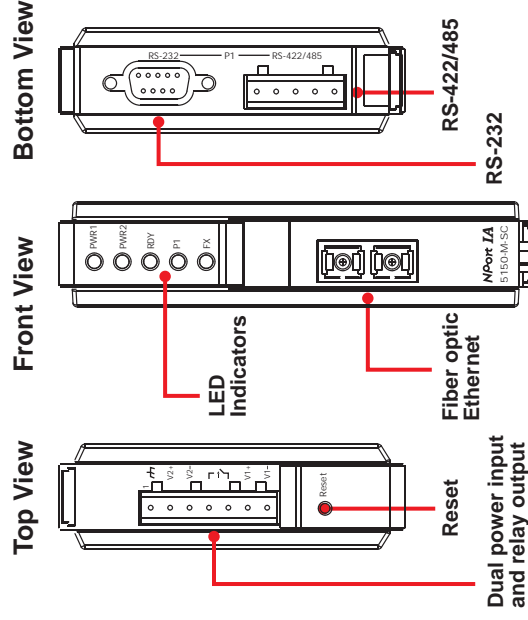
- DR-4524 45W/2A DIN-Rail 24 VDC Power Supply with universal 85 to 264 VAC input
- DR-75-24 75W/3.2A DIN-Rail 24 VDC Power Supply with universal 85 to 264 VAC input
- DR-120-24 120W/5A DIN-Rail 24 VDC Power Supply with 88 to 132 VAC/176 to 264 VAC input by switch

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

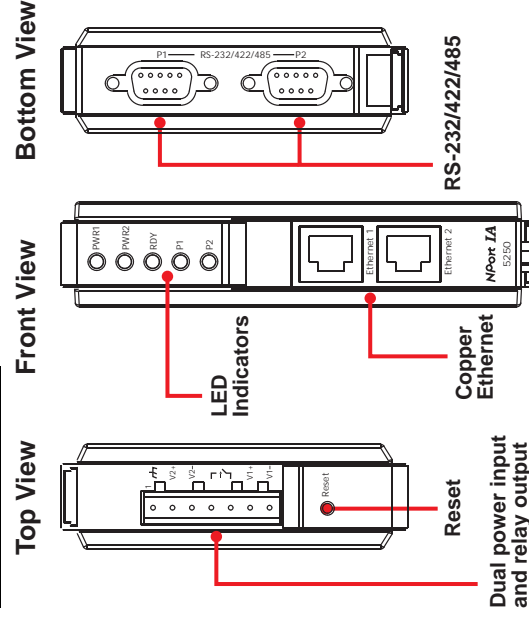
## 3. Hardware Introduction

NPort IA device servers are used to control RS-232/422/485 devices for industrial automation environments. Six of the models have 1 RS-232/422/485 serial port. NPort IA5150, NPort IA5150L, NPort IA5150-M-SC, NPort IA5150L-M-SC, NPort IA5150-S-SC, and NPort IA5150L-S-SC have 1 male DB9 port for the RS-232 interface, and a 5-pin terminal block for the RS-422/485 interface (only one port can be used at a time). One model has 2 RS-232/422/485 serial ports. NPort IA5250 has two male DB9 ports for all interfaces.

### NPort IA5150 Series Appearance

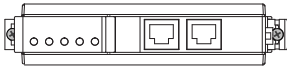


### NPort IA5250 Appearance

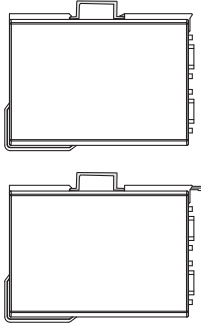


**Reset Button**—Press the Reset button continuously for 5 sec to load factory defaults: Use a pointed object, such as a straightened paper clip or toothpick, to press the reset button. This will cause the Ready LED to blink on and off. The factory defaults will be loaded once the Ready LED stops blinking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

**Wall Mount**

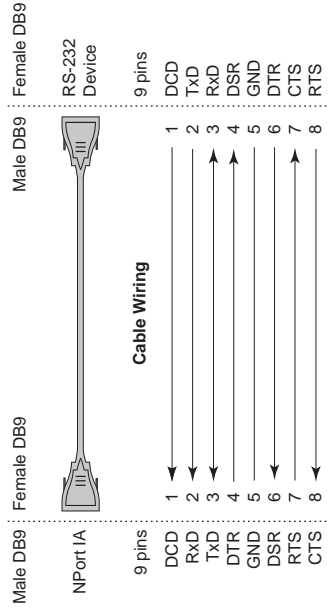


**DIN-Rail**



Four cables are available as optional accessories that can be used to connect NPort IA to RS-232 serial devices. For your convenience, we show precise cable wiring diagrams for each of the two cables.

**Female DB9 to Male DB9**

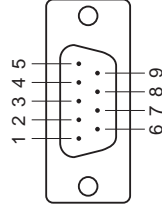


**5. Software Installation Information**

To install NPort Administration Suite, insert the **Document & Software CD** into your computer's CD-ROM drive. Once the installation window opens, click on the **Installation Administration Suite** button, and then follow the instructions on the screen. To view detailed information about **NPort IA Administration Suite**, click on the **Documents** button, and then select NPort IA5150/5250 Series User's Manual to open the pdf version of this user's manual.

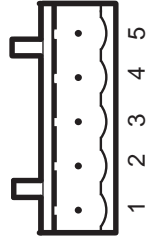
**6. Pin Assignments and Cable Wiring**

**RS-232/422/485 (Male DB9) Pinouts**



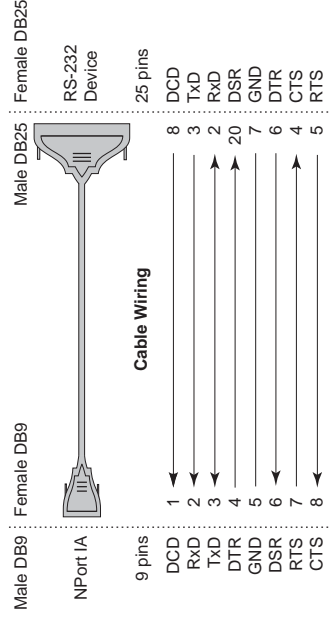
PIN	RS-232	RS-422/ RS-485 (4W)	RS-485 (2W)
1	DCD	TxD-(A)	---
2	RxD	TxD+(B)	---
3	TxD	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	Data-(A)
5	GND	GND	GND
6	DSR	---	---
7	RTS	---	---
8	CTS	---	---
9	---	---	---

**4W/2W RS-485/RS-422 (Terminal Block) Pinouts**



PIN	2W	4W
1	---	---
2	---	---
3	Data+(B)	RxD+
4	Data-(A)	RxD-(A)
5	---	GND

**Female DB25 to Male DB25**



**7. Specifications**

Power requirements	NPort IA5150:	12 to 48 VDC, 360 mA at 12 V (max.)
	NPort IA5150I:	12 to 48 VDC, 420 mA at 12 V (max.)
	NPort IA5150-S-SC:	12 to 48 VDC, 470 mA at 12 V (max.)
	NPort IA5150I-S-SC:	12 to 48 VDC, 490 mA at 12 V (max.)
	NPort IA5150-M-SC:	12 to 48 VDC, 500 mA at 12 V (max.)
	NPort IA5150I-M-SC:	12 to 48 VDC, 510 mA at 12 V (max.)
	NPort IA5250:	12 to 48 VDC, 440 mA at 12 V (max.)
Operating temp.		0 to 55°C (32 to 131°F)
Operating humidity		5 to 95% RH