



MOXA NPort 5600 Series 16 Port Device Server Installation Guide

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NPort 5600 Series Quick Installation Guide

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Overview

Welcome to the Moxa NPort 5600 Series. The NPort 5610-8/16 has 8 or 16 RS-232 ports, the NPort 5630-8/16 has 8 or 16 RS-422/485 ports, and the NPort 5650-8/16 has 8 or 16 RS-232/422/485 ports.

NPort 5600 Series Models

The NPort 5600 Series includes the following models: NPort 5610-8, NPort 5610-16, NPort 5610-8-48V, NPort 5610-16-48V, NPort 5630-8, NPort 5630-16, NPort 5650-8, NPort 5650-8-T, NPort 5650-8-HV-T, NPort 5650-16-HV-T, NPort 5650-16, NPort 5650-16-T, NPort 5650-8M-SC, NPort 5650-16-M-SC, NPort 5650-8-S-SC, and NPort 5650-16-SSC.

Package Checklist

The NPort 5600 package should contain the following items:

- 1 NPort 5600 Series serial device server
- Power cord (AC models only)
- 1 DIN-rail/wall-mounting kit: WK-45-01
- NPort 5600 Quick Installation Guide

Optional Accessories:

- CBL-RJ45M9-150: 8-pin RJ45 to DB9 male cable, 150 cm
- CBL-RJ45F9-150: 8-pin RJ45 to DB9 female cable, 150 cm
- CBL-RJ45M25-150: 8-pin RJ45 to DB25 male cable, 150 cm
- CBL-RJ45F25-150: 8-pin RJ45 to DB25 female cable, 150 cm

Note: Please notify your sales representative if any of the above items is missing or damaged.

Hardware Introduction

NOTE

The wide temperature model does not come with LCM display panels or push buttons. All of the LCM descriptions below apply only to standard temperature models.

The front and rear panels are shown below:

Front panel of the NPort 5600 Series



Rear panel of the NPort 5610/5630/5650 (AC Power)



Rear panel of the NPort 5650 (Fiber Model)



Rear panel of the NPort 5610 (DC Power)



Front panel of the NPort 5650-T Series



Reset Button— press the Reset button continuously for 5 seconds to load factory defaults: Use a pointed object to press the reset button.
 Release the button after the Ready LED stops blinking.

LED Indicators on the Front Panel— the front panels of the NPort 5600 have several LED indicators, as described in the following table.

| Name | Color | Function |
|---------|--------|---|
| Ready | Off | Power is off, or power error condition exists. |
| | Red | Steady on: Power is on and the NPort is booting up. |
| | | Blinking: Indicates an IP conflict, or DHCP or BOOTP server did not respond properly. |
| | Green | Steady on: Power is on and the NPort is functioning normally. |
| | | Blinking: The NPort has been located by NPort Administrator's Location function. |
| 1 to 16 | Orange | Serial port is receiving data. |
| | Green | Serial port is transmitting data. |
| | Off | No data is being transmitted or received through the serial port. |

LCM Display Panel—If the NPort is working properly, the LCM panel will display a green color. The red Ready LED will also light up, indicating that the NPort is receiving power. After the red Ready LED turns green, you will see a display similar to:

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| N | P | 5 | 6 | 1 | 0 | — | 1 | 6 | | 3 | 8 | | | | |
| 1 | 9 | 2 | . | 1 | 6 | 8 | . | 1 | 2 | 7 | . | 2 | 5 | 4 | |

This is where:

- NP5610-16 is the NPort's name
- 38 is the NPort's local sequence number
- 192.168.127.254 is the NPort's IP address

LCM Panel Operation—There are four buttons on the NPort 5600's front panel. These buttons are used to operate the server's LCM panel.
 Going from left to right, the buttons are:

| Button | Action |
|--------|--|
| MENU | Activates the main menu, or returns to a lower level. |
| | Scrolls up through a list of items shown on the LCM panel's second line. |
| | Scrolls down through a list of items shown on the LCM panel's second line. |
| SEL | Selects the option listed on the LCM panel's second line. |

Detailed LCM Panel Operating instructions can be found in the NPort 5600 Series User's Manual.

Link Indicator on the rear panel of the NPort 5650 fiber model— the rear panels of the NPort 5650 have a link indicator, as described in the following table.

| LED Name | LED Color | LED Function |
|----------|-----------|---|
| Link | Off | Fiber disconnected. |
| | Green | Fiber connected, data not transmitting. |
| | Blinking | Fiber connected, data is transmitting. |

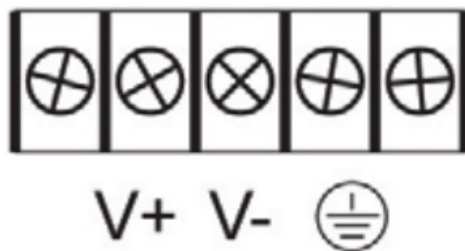
Hardware Installation

STEP 1: After removing the NPort 5600 from the box, the first thing you should do is attach the power adapter.

STEP 2: Connecting the Power.

AC: Connect the NPort 5600's 100-240 VAC power cord to the AC connector. The "Ready" LED will show a solid red color until the system is ready, at which time it will change to a green color.

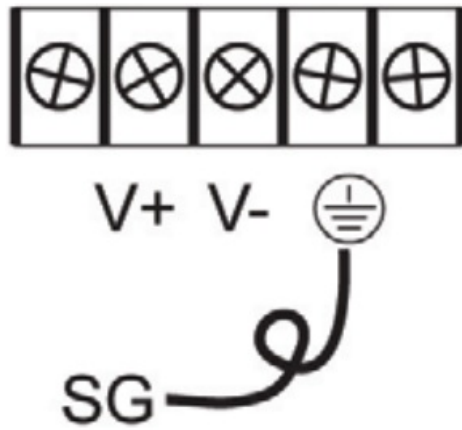
DC: Connect the NPort 5600 VDC's power cord to the DC connector, and then follow the steps given below:



Take NPort 5610-8-48V as an example. Loosen the screws on the V+ and V- terminals of the NPort 5610-8-48V's terminal block. Connect the power cord's 48 VDC or -48 VDC wire to the terminal block's V+ terminal, and the power cord's DC Power Ground wire to the terminal block's V- terminal, and then tighten the terminal block screws. (Note: The NPort 5610-8-48V can still operate even if the 48V/48V and DC Power Ground are reversed.) The "Ready" LED will show a solid red color until the system is ready, at which time it will change to a green color.

Grounding the NPort 5600 VDC:

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices. The Shielded Ground (sometimes called Protected Ground) contact is the second contact from the right of the 5-pin power terminal block connector located on the rear panel of the NPort 5610-8-48V. Connect the SG wire to the Earth ground.



STEP 3: Connect the NPort 5600 to a network. Use a standard straightthrough Ethernet cable to connect to a hub or switch. When setting up or testing the NPort 5600, you might find it convenient to connect directly to your computer's Ethernet port. In this case, use a cross-over Ethernet cable.

STEP 4: Connect the NPort 5600's serial port to a serial device.

Placement Options: You can place the NPort 5600 on a desktop or other horizontal surface.

Software Installation Information

For the NPort's configuration, the default IP address of the NPort is: LAN: Static; IP = 192.168.127.254; netmask = 255.255.255.0

NOTE

If you have forgotten the NPort's IP address, use the Device Search Utility (DSU) from your PC to locate the NPort. After searching the LAN for NPort units, the DSU will display the IP address of each unit.

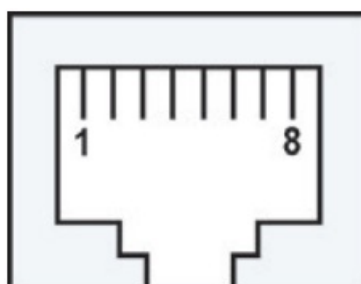
You may log in with the password *moxa* to change any settings to meet your network topology (e.g., IP address) or serial device (e.g., serial parameters). For first-time use, click the Wizard in the left navigation panel. The wizard will prompt you to configure the IP address, SSID, and security mode. For other settings, use the factory defaults or modify the settings for your application.

For software installation, download the relative utilities from Moxa's website:
https://www.moxa.com/support/support_home.aspx?isSearchShow=1

- Download the NPort Windows Driver Manager and install it as the driver to run with Real COM mode of the NPort Series.
- Execute NPort Windows Driver Manager; then map the virtual COM ports on your Windows platform.
- You may refer to the pin assignment section to loop back pin 4 and pin 5 for the RS-232 interface to carry out a self test on the device.
- Use HyperTerminal or a similar program (you may download Moxa's program, called PComm Lite) to test whether the device is good or not.

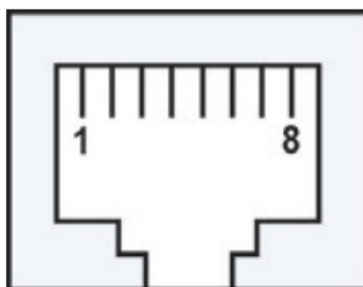
Pin Assignments and Cable Wiring

Serial Port Pinouts for the NPort 5610



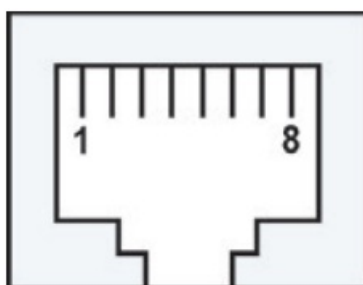
| Pin | RS-232 |
|-----|----------|
| 1 | DSR (in) |
| 2 | RTS(out) |
| 3 | GND |
| 4 | TxD(out) |
| 5 | RxD(in) |
| 6 | DCD(in) |
| 7 | CTS(in) |
| 8 | DTR(out) |

Serial Port Pinouts for theNPort 5630



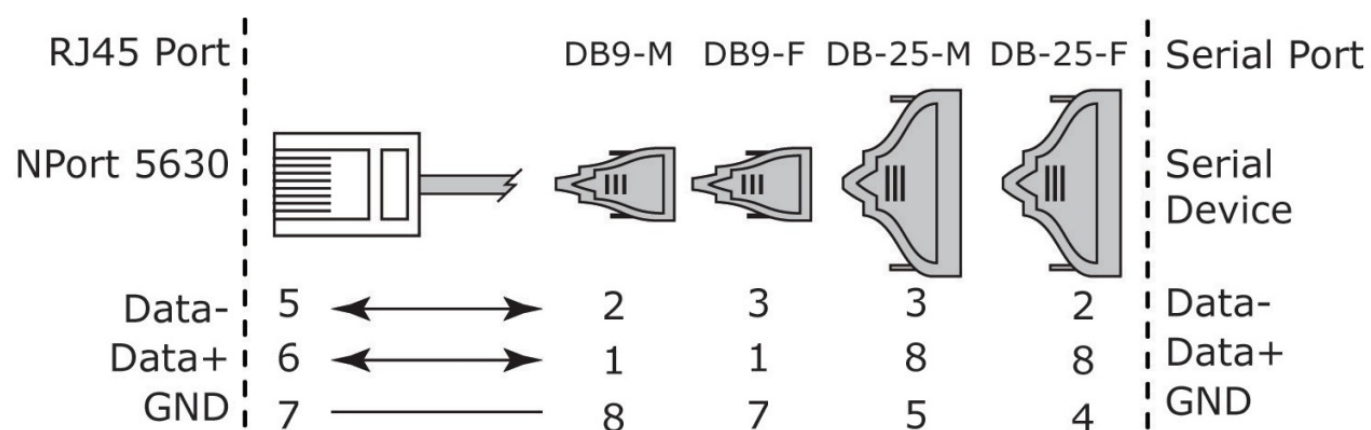
| Pin | RS-422/RS-485-4W | RS-485-2W |
|-----|------------------|-----------|
| 1 | — | — |
| 2 | — | — |
| 3 | TxD+ | — |
| 4 | TxD- | — |
| 5 | RxD- | Data- |
| 6 | RxD+ | Data+ |
| 7 | GND | GND |
| 8 | — | — |

Serial Port Pinouts for the NPort 5650

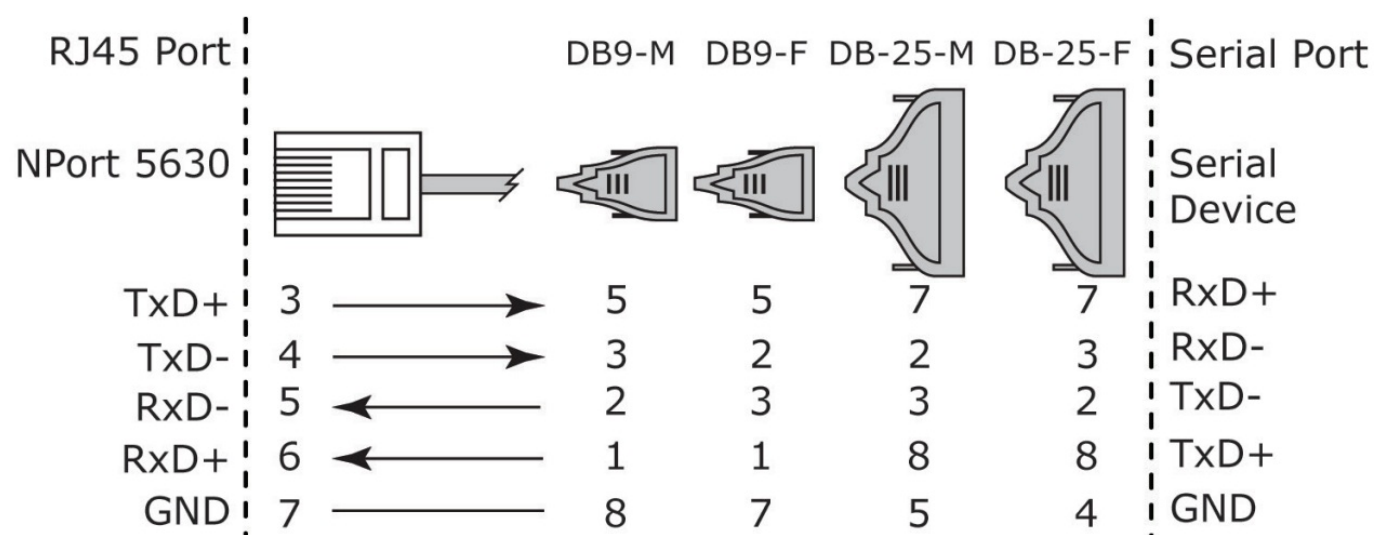


| Pin | RS-232 | RS-422/RS-485-4W | RS-485-2W |
|-----|--------|------------------|-----------|
| 1 | DSR | – | – |
| 2 | RTS | TxD+ | – |
| 3 | GND | GND | GND |
| 4 | TxD | TxD- | – |
| 5 | RxD | RxD+ | Data+ |
| 6 | DCD | RxD- | Data- |
| 7 | CTS | – | – |
| 8 | DTR | – | – |

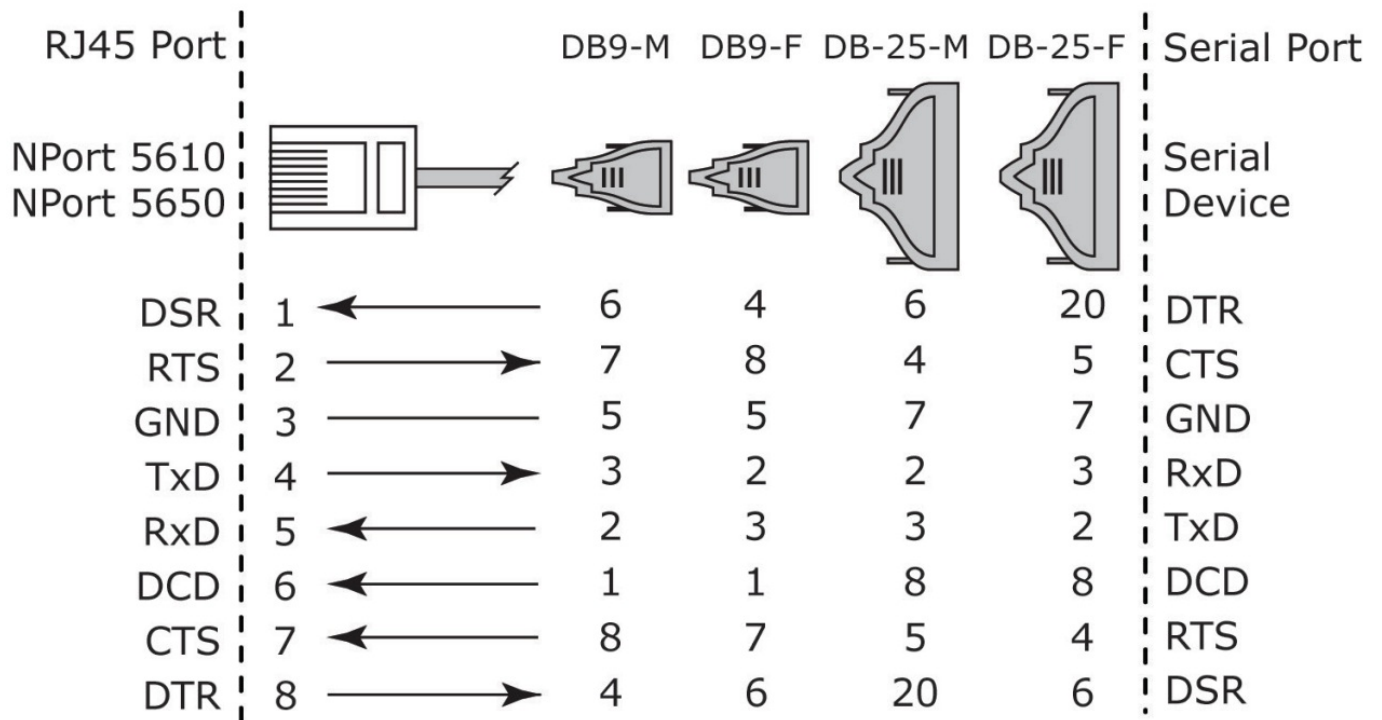
Serial Cables for the NPort 5630 (2-wire RS-485)



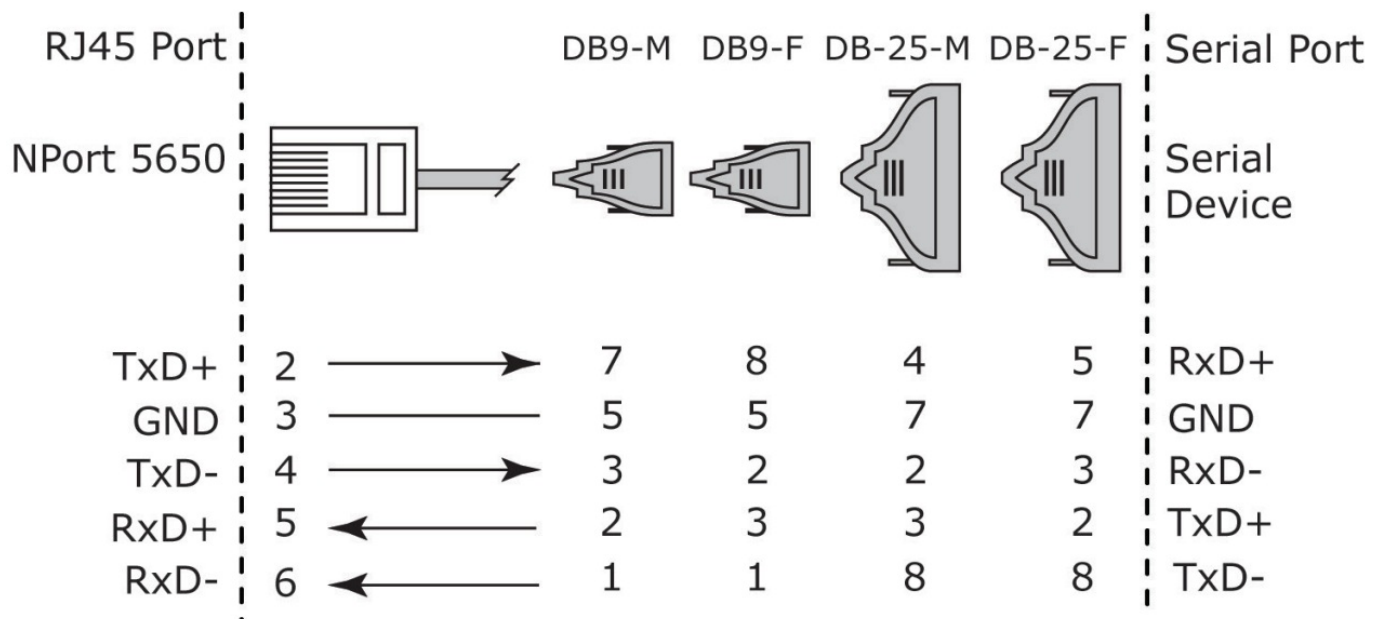
Serial Cables for the NPort 5630 (RS-422/4-wire RS-485)



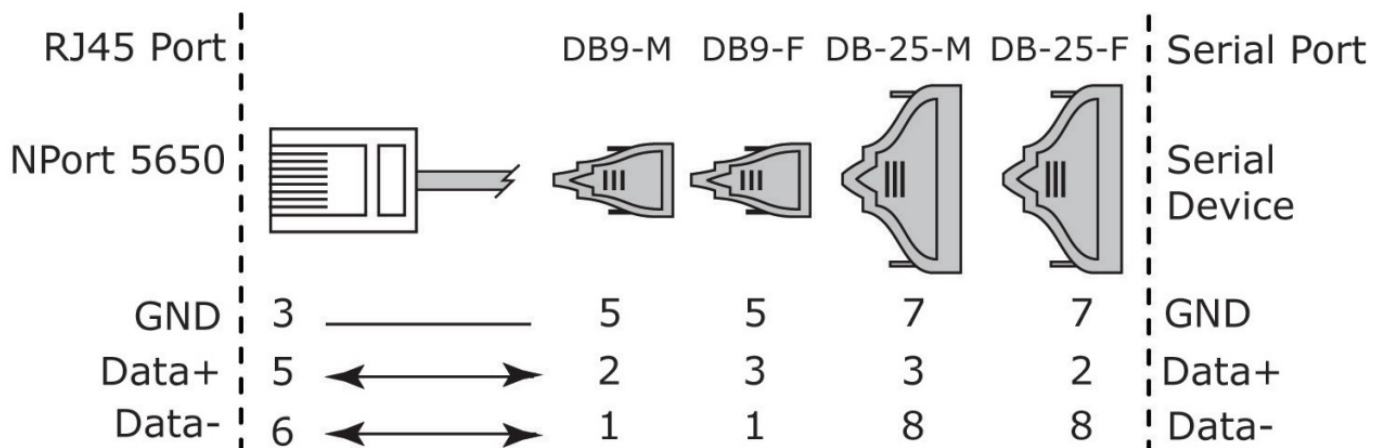
Serial Cables for the NPort 5610/5650 (RS-232)



Serial Cables for the NPort 5650 (RS-422/4-wire RS-485)



Serial Cables for the NPort 5650(2-wire RS-485)



| | |
|--|---|
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| Moxa India: Tel: +91-80-4172-9088 Fax: +91-80-4132-1045 | |



Documents / Resources

| | |
|--|---|
| | <p>MOXA NPort 5600 Series 16 Port Device Server [pdf] Installation Guide</p> <p>NPort 5610-8, NPort 5610-16, NPort 5630-8, NPort 5630-16, NPort 5650-8, NPort 5650-8-T, NPort 5650-8-HV-T, NPort 5650-16-HV-T, NPort 5650-16, NPort 5650-16-T, NPort 5650-8M-SC, NPort 5650-16-M-SC, NPort 5650-8-S-SC, NPort 5650-16-SSC., NPort 5600 Series, NPort 5600 Series 16 Port Device Server, 16 Port Device Server, Device Server, Server</p> |
|--|---|

References

- [M Moxa - Support](#)
- [Manual-Hub.com - Free PDF manuals!](#)
- [M Moxa - Support](#)
- [User Manual](#)