# Printer Mode for the NPort 6000 Series

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## What is Printer Mode?

Printer mode can be used to connect a printer to the network. As shown in the diagram below, the printer connects to the NPort 6000's serial port, and then the NPort 6000 connects to the network. In this case the printer's location is indicated with a TCP port number. Windows or UNIX hosts can access the printer over the network in either RAW mode or LPD mode.



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#### About Moxa

Moxa manufactures one of the world's leading brands of device networking solutions. Products include serial boards, USB-to-serial hubs, media converters, device servers, embedded computers, Ethernet I/O products, terminal servers, Modbus gateways, industrial switches, and Ethernet-to-fiber converters. Our products are key components of many networking applications, including industrial automation, manufacturing, POS, and medical treatment facilities.

#### How to Contact Moxa

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# How to configure Printer Mode on the NPort 6000?

Before proceeding with the following steps, push the "RESET" button for 10 seconds to reset your NPort to factory defaults.

- 1. Power on the NPort, and then wait until the LED indicator illuminates in green.
- 2. Connect the host PC and NPort to the same network.
- Adjust the IP configuration of your host PC and the NPort so that you can PING from the PC to the NPort. The NPort's default IP address is 192.168.127.254.
  Don't forget to change the IP address of the host PC if you have already changed the NPort's IP address.
- 4. Install and run the "NPort Search Utility."
- 5. Use "Search" or "Search IP" to locate the NPort over the network.
- 6. Select a specific NPort, and then click the **Console** icon to open the Web console.
- 7. Access **Basic Settings** from the navigation panel to configure the server name and time settings.
- Access Network Settings → Basic Network Settings to assign the IP address, netmask, Gateway, and other IP parameters. NOTE: Configure the NPort's and PC's IP parameters so that they are on the same network.
- 9. Access the **Communication Parameters** section to configure baud rate, Data bits, Parity, Stop bit, and other parameters.
- 10. Select **Operation Modes** from the navigation panel to configure your serial ports for printer mode.

A: Printer\_ RAW\_PRN mode: Remember to select group (e.g., select Group01 with TCP port number 2048)

B: Printer\_LPD\_PRN mode: Enter the queue name

More information about printers, please refer to: <u>http://technet2.microsoft.com/windowsserver/en/library/9ea75c35-a74f-4</u> f57-9072-03cf76d563a31033.mspx?mfr=true

- 11. Click **Submit** to save your settings and restart the NPort.
- 12. Use the Windows Control Panel to add the printer(s) to your system.
- 13. Select "Local printer attached to this computer."
- 14. Select "Create new port" and enter the NPort's IP address.
- 15. Select "Custom."

A: Select protocol: Raw, enter TCP port number (e.g., 2048)

B: Select protocol: LPR, enter queue name

ATTENTION: The protocol and TCP port number or queue name must be the same as in the NPort settings.

16. Select the printer driver. This finishes the Windows printer installation.

## How to test Printer Mode

- 1. Open the document you will use for the test printing.
- 2. Select one of the NPort printers.
- 3. Start printing.
- 4. If the document is printed, your installation was successful. If the printer does NOT print the document, the installation was a failure. Please check the configuration, and then try again.

## **Cable Wiring**

RS-232 Cable Wiring		
NPort	Device	
TxD •	RxD	
RxD •	TxD	
RTS •	CTS	
CTS •	RTS	
DTR •	DSR	
DSR •	DTR	
DCD •	DCD	
GND •	GND	

4 wire RS-422/485 Cable Wiring		
NPort	Device	
Tx (+) • · · · · · · · · · · · · · · · · · ·	Rx (+) Rx (-) Rx (-) Tx (+) Tx (-) GND	

2 wire RS-485 Cable Wiring		
NPort	1 Device	
D (+)	D (+)	
D (-)	• D (-)	
GND •	GND	