NPort Z3150 Series
Quick Installation Guide

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P/N: 1802031500012

Overview

NPort Z3150 is a gateway that provides computers with an Ethernet interface to a ZigBee PAN. Unlike a bridge, which logically extends a PAN across an Internet connection, a gateway provides network services on behalf of a ZigBee PAN. Software on any computer can monitor any ZigBee device in the PAN via the NPort Z3150.

Package Checklist

Before installing the NPort Z3150, verify that the package contains the following items:

Standard Accessories

- NPort Z3150
- RJ45 to RJ45 Ethernet cross-over cable
- 2.4 GHz omni-directional antenna
- Document & Software CD
- Quick installation guide (printed)
- Warranty card

Optional Accessories

- DK-35A: DIN-rail mounting kit (35 mm)

NOTE: Please notify your sales representative if any of the above items are missing or damaged

Hardware Introduction

LED Indicators

Top Panel LED Indicators

There are three LEDs on NPort Z3150.

LED	Color	Descriptions
Ready/Fault	Green	On: System power on
		Blinking:
		1) Device locating
		2) Pull down the reset button
	Red	On: System initialization failed
ZigBee	Green	On: Initialized ZigBee PAN successfully
		Blinking: ZigBee Tx/Rx
		Off: ZigBee PAN initialization failure
Serial Tx/Rx	Green	Serial data output to serial port
	Orange	Serial data input from serial port

End Panel LED Indicators

Name	Color	Descriptions
Ethernet	Orange	10 Mbps Ethernet connection
	Green	100 Mbps Ethernet connection
	Off	Ethernet cable is disconnected or has a short

The NPort Z3150 models have one serial port. All models support RS-232/422/485 operation with DB9 connectors, and include one 10/100M Ethernet port.
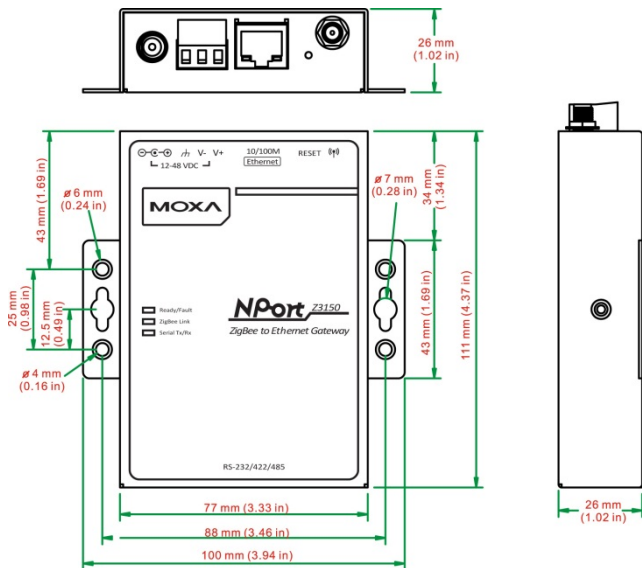

Reset Button

The reset button is used to load factory defaults. Use a pointed object such as a straightened paper clip to hold the reset button down for five seconds. Release the reset button when the Ready LED stops blinking.

Pull High/Low Resistors for RS-422/485

You may need to set the pull high/low resistors when termination resistors are used for certain RS-422 or RS-485 environments.
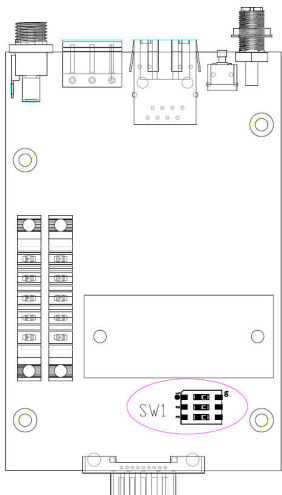
SW		1	2	3
		Pull High	Pull Low	Terminator
	ON	1 KΩ	1 KΩ	120 Ω
Default	OFF	150 KΩ	150 KΩ	–

NOTE Do not use the 1KΩ setting while in RS-232 mode. Doing so will degrade the RS-232 signals and reduce the effective communication distance.

First-time Hardware Installation

STEP 1: After removing the NPort Z3150 from the box, use a cross-over Ethernet cable to connect the NPort's RJ45 Ethernet port directly to your computer's.

STEP 2: Attach the power adaptor to the NPort and then plug the adaptor into an electrical outlet.

STEP 3: Configure the NPort Z3150 through the Ethernet port. See the next section for software installation information.

Software Installation Information

Insert the Documentation & Software CD. A window should open with several options displayed:

- Click **[Documents]** and select "NPort Z3150 Series User's Manual" to view the user's manual.
- Click **[Install UTILITY]** and follow the on-screen instructions to install the NPort Search Utility. This utility can be used to search for NPort Z3150 units on the network.

The Factory default IP settings are assigned as follows:

LAN: Static; IP = 192.168.127.254; netmask = 255.255.255.0

If the NPort is configured for DHCP but the DHCP server cannot be found, the NPort will use factory default IP settings.

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

Open the web console to make configuration changes as follows:

STEP 1: Open your web browser.

STEP 2: In the address bar, enter 192.168.127.254 (the default IP address).

STEP 3: The web console will open, and the current configuration settings will be displayed.
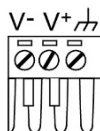
Pin Assignments and Cable Wiring

PIN	RS-232	RS-422, 4w RS-485	2w RS-485
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	–	–	–
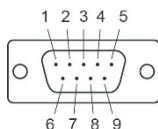
Power Input Pinouts

	V+	V-
Shielded Ground	DC Power Input, Positive Electrode	DC Power Input, Negative Electrode

Specifications

Power Requirements	
Input Voltage	12 to 48 VDC
Power Consumption	45 mA @ 12 V
Connector	Power Jack
Physical Characteristics	
Weight	380 g
Dimension	
Without ears:	67 x 100.4 x 22 mm (2.64 x 3.95 x 0.87 in)
With ears:	90 x 100 x 22 mm (3.54 x 3.94 x 0.87 in)
Regulatory Approvals	
EMC	CE (EN 55032 Class A, EN 55024), FCC Part 15 Subpart B Class A
Safety	UL (UL 60950-1), LVD (EN 60950-1)
Reliability	
Automatic Reboot Trigger	Built-in WDT (watchdog timer)

⚠ WARNING

1. This equipment is intended to be used in a Restricted Access Location.
2. This product is intended to be supplied by an UL 60950-1 and IEC 60950-1 certified power supply marked "LPS" and rated output rating: 12 to 48 VDC, 120 mA @ 12 V minimum, 75°C.