



by Schneider Electric

NetBotz® USB Coordinator & Router Quick Start Guide

The NetBotz® USB Coordinator & Router (NBWC100U) connects to a NetBotz Room Monitor 455 and NetBotz Rack Monitor 250, 450, 550, or 570, allowing you to monitor the temperature and humidity in your data center using the Wireless Temperature Sensor (NBWS100T and NBWS100H). You can also use the Wireless Sensor Pod 180 (NBPD0180) to monitor multiple temperature readings and rack door access with the NetBotz Rack Monitor 450, 550, or 570, or the NetBotz Room Monitor 455.

The USB Coordinator & Router can be configured as a Coordinator or a Router in a wireless network. Each wireless network must have one Coordinator, powered by a USB connection to the NetBotz appliance. Routers are powered by the AC-USB adapter, separate from the NetBotz appliance. Routers are optional; one Router for every three racks is recommended. Apply power to End Devices last.

The NetBotz Room Monitor 455, Rack Monitor 250, 450, 550, and Rack Monitor 570 appliances support a total of 48 wireless devices on the wireless sensor network.

The following wireless devices can be configured as a Coordinator or Router:

| Sensor | Range | Part Number |
|----------------------------------|-------------------------|-------------|
| NetBotz USB Coordinator & Router | 100 ft. – line of sight | NBWC100U |
| NetBotz Wireless Sensor Pod 180* | 100 ft. – line of sight | NBPD0180 |

The following wireless devices can be configured as an End Device:

| Sensor | Range | Part Number |
|-------------------------------------|-------------------------|--------------------|
| NetBotz Wireless Temperature Sensor | 100 ft. – line of sight | NBWS100T, NBWS100H |
| NetBotz Wireless Sensor Pod 180* | 100 ft. – line of sight | NBPD0180 |

*The Wireless Sensor Pod 180 is not supported on the Rack Monitor 250

Instructions

Depending on the NetBotz appliance, you can add wireless sensors to the network in the following ways:

- Enter the MAC addresses for the wireless sensors manually.
- Use any barcode or QR code scanner to save a list of MAC addresses to a text file, one address per line, and copy and paste it into the dialog.
- Use a hand-held USB scanner to manually scan the MAC address bar code on the USB Coordinator & Router label, or the QR code on the Wireless Temperature Sensor or Wireless Sensor Pod 180, directly into the dialog.
- Once the Coordinator is connected to the appliance, allow powered wireless devices to automatically join and form the network using Auto Join.

NOTE: Some bar code and QR code scanners return the part number, serial number, and MAC address on one line: XN:NBWC100U%SN:XXXXXX123456%MAC:00C0B70000XXXXXX. To add a device to your wireless network, enter only the alphanumeric MAC address of each device.

NetBotz Room Monitor 455 and NetBotz Rack Monitor 450, 550, or 570

The USB Coordinator & Router requires a minimum of BotzWare v4.4 and Advanced View v4.4. Auto Join is available in NetBotz 4.5 x. To upgrade Advanced View, and the BotzWare version installed on your appliance, use the **Upgrade** icon in your NetBotz appliance Advanced View, or visit the www.apc.com.

You add wireless sensors to the network in the Advanced View **Wireless Sensor Setup** task. Click **Apply Commission List** to save the list of MAC addresses to the NetBotz appliance.

NetBotz Rack Monitor 250

The Rack Monitor 250 comes with the Coordinator connected to its Wireless USB port. When the appliance is turned on, the Coordinator is enabled and the network is running. Go to **Configuration > Device > Wireless Sensor Network** to see the status of the Coordinator and add devices to the network. Click **Add New Sensor** to

enter the MAC address of each wireless sensor individually, or click **Enable Auto Join** to allow powered devices to join and form the network automatically. For more information, see the installation manual for your NetBotz appliance.

The order in which you apply power to and configure your wireless network is important. For best results, apply power and configure your wireless network as follows:

1. Select the Coordinator and the Routers. Choose one USB Coordinator & Router that will become the Coordinator. Note the MAC address of the Coordinator. Choose one or more USB Coordinator & Routers to become Routers (optional).
2. Mount the sensors. Choose the locations for the Routers and End Devices. To conserve battery life, do not apply power to the Routers or End Devices at this time.
3. Apply power to the Coordinator first. Connect one and only one USB Coordinator & Router to a USB Type A port on the NetBotz appliance. This device will automatically be configured as the Coordinator on your wireless sensor network.
4. Apply power to the Routers. Use the included adapter to connect each Router to an AC-USB power source separate from the NetBotz appliance.
5. Apply power to the End Devices. Turn on the Wireless Temperature Sensor using the rocker switch on its side. To apply power to the Wireless Sensor Pod 180, insert the batteries included with the product.

LED Activity

During the boot process in both Coordinator and Router mode, LED activity is as follows:

- Flashes a quick green, yellow, red sequence
- Alternately flashes green and yellow for about 30 seconds
- Flashes green 3 times
- Turns solid yellow for 5 seconds
- Flashes a quick green, yellow, green sequence

NOTE: If the LED flashes red three times, then slowly flashes red, contact Technical Support.

After the boot process is complete, LED activity on the USB Coordinator & Router signifies its status:

Coordinator LED Activity

| LED Activity | Meaning |
|---------------|-------------------------------------------------------------------------|
| Flashes green | Normal. The network was formed successfully. |
| Off | Forming a network |
| Solid green | Joined another network as a Router. |
| Solid red | Unable to form a network. Relocate the Coordinator. Reboot the device.* |

Router LED Activity

| LED Activity | Meaning |
|--------------|------------------------------------------------------------------------------------------------|
| Solid green | Normal. Joined the network as a Router. |
| Solid yellow | Searching for network |
| Off | The device was previously configured as a Coordinator. Reset the device to factory defaults.** |

* To reboot the USB Coordinator & Router, press and hold the reset button for no more than three seconds. The device will operate in the mode in which it was configured before the reboot.

** To reset the USB Coordinator & Router to factory defaults, press and hold the reset button for at least 5 seconds. Release the reset button when the LED is solid red. The device will reset, erase its current settings, and return to Router mode, the factory default.

For more information about installing and configuring the USB Coordinator & Router, see the *USB Coordinator and Router Installation Manual* on www.apc.com. For assistance, contact a local Customer Care Center: go to www.apc.com/support, and select your country from the dropdown list.