The NetBotz® Wireless Temperature Sensor connects to the wireless network on a NetBotz Room Monitor 455 and NetBotz Rack Monitor 450, 550, or 570, allowing you to monitor the temperature (NBWS100T) or temperature and humidity (NBWS100H) in your data center.

#### The Wireless Temperature Sensor requires a minimum of BotzWare version 4.4 and Advanced View 4.4.

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 APC web site.

Each NetBotz wireless network must have one and only one Coordinator. Routers are optional; one Router for every three racks is recommended. The Wireless Temperature Sensor is always configured as an End Device.

The following devices are supported on the NetBotz wireless sensor network:

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
NetBotz Wireless Temperature	100 ft. – line of sight	NBWS100T
Sensor		NBWS100H

For information about installing and configuring your wireless sensor network, see the installation manual that came with the NetBotz Wireless Sensor Pod 180 (NBPD0180), or the NetBotz Wireless USB Coordinator & Router (NBWC100U).

The NetBotz Rack Monitor 450 appliance supports a total of **26** wireless devices on the wireless sensor network, including the Coordinator and Routers. The NetBotz Room Monitor 455, Rack Monitor 550, and Rack Monitor 570 appliances support a total of **48** wireless devices on the wireless sensor network, including the Coordinator and Routers.

The order in which you power and configure your wireless network is important. For best results, power and configure the Coordinator, and any Routers, before adding the Wireless Temperature Sensor to the network.

## Adding the Wireless Temperature Sensor to your wireless sensor network

- Add the MAC address of the Wireless Temperature Sensor to your wireless sensor network in Advanced View.
- Mount the sensor.

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• Turn the sensor on.

You can attach a USB handheld QR code scanner with document capture capabilities to a computer running Advanced View v4.4, and scan the QR code on each Wireless Temperature Sensor to add its MAC address to your network. Alternatively, you can use any QR code scanner, and save a list of MAC addresses to a text file, one address per line, then paste the list into the Advanced View, or enter the MAC addresses manually.

Once the addresses have been added to the list, you must click **Apply Commission List** to save the list to the NetBotz appliance.

Some QR code scanners return the part number, serial number, and MAC address on one line: XN:NBWS100T%SN:XXXXX123456%MAC:**00C0B70000XXXXXX**. To add a Wireless Temperature Sensor to your wireless network, copy **only** the alphanumeric MAC address of each sensor.

## Scanning the QR code into Advanced View

- 1. Attach the USB QR code scanner to the computer running Advanced View.
- 2. Log in to the NetBotz appliance hosting your wireless network using Advanced View; select the Configuration tab, and double-click the **Wireless Sensor Setup** icon.
- 3. Click **Add**. With the "Add Addresses" dialog open, scan the QR code on the label of each Wireless Temperature Sensor you want to add to your wireless network.
- **Note**: Ensure <u>only</u> the MAC address of each sensor is in the list, one per line.
- 4. Click Apply Commission List to save the list of MAC addresses to the NetBotz appliance.

## Mounting the sensors

Mount the Wireless Temperature Sensor using the magnets on its base, the cable ties and adhesive cable tie holders, or the wall bracket and foam adhesive strips or screws. To maintain access to the QR code, and to make replacing the battery easier, using the foam adhesive strips directly on the Wireless Temperature Sensor is not recommended.

# Powering the sensors

Turn each sensor on using the rocker switch on its side. The sensor will scan all channels, and send a request to join the wireless network. Once the request is accepted, the sensor will join the wireless network.

# LED activity

During the boot process, LED activity on the Wireless Temperature Sensor is as follows:

LED Activity	Meaning
Flashes quick green, red, yellow	Power on
sequence	
Alternately flashes green and yellow	Runtime check
for 45 seconds	
Flashes green three times	Check OK
Turns solid yellow for 5 seconds	Firmware update check
Flashes quick green, yellow green	Ready to attempt to join the network
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 Wireless Temperature signifies its status:

LED Activity	Meaning	
Flashes yellow twice every 2 seconds	Searching for network	
Turns solid green, then turns off	Joined the network	
Off	Joined the network, or has not joined the network and is	
	conserving battery power.	

To conserve battery power, the Wireless Temperature Sensor will attempt to join the network after waiting the following number of seconds: 5, 15, 30, 60, 120, 300, 300, 600, 600, 1200.

If the attempts to join the network fail, the Wireless Temperature Sensor will scan the network every six hours to re-try the connection. If it cannot join the network after approximately 24 hours, it will reboot and attempt to join the network again, repeating the wait interval starting at 5 seconds, until it joins the network.

To force an attempt to join the network, press the reset button to reboot the sensor.

## Using the reset button

The reset button on the side of the Wireless Temperature Sensor is used to reboot the sensor, or reset the sensor to the factory default settings.

To reboot the Wireless Temperature Sensor:

- Press and hold the reset button for no more than three seconds.
- The status LED will flash green, and the sensor will reboot with its current settings in place.

To reset the Wireless Temperature Sensor to factory defaults:

- Press and hold the reset button for at least 5 seconds.
- Release the reset button when the LED is solid red.

For more information about installing and configuring the NetBotz Wireless Temperature Sensor, please refer to the Installation Guide, or contact Technical Support at 877-908-2688 for assistance. To contact a local, country-specific Schneider Electric Customer Care Center, go to <u>www.apc.com/support/contact</u>.