



by Schneider Electric

# NetBotz® Rack Monitor 250 Firmware v6.4.6 Release Notes

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## Part Numbers Affected

NBRK0250
NBACS0125
NBACS1356

## Supported Browsers

Access the web user interface of the NetBotz® Rack Monitor 250 using Microsoft Internet Explorer® 11, Mozilla® Firefox®, or Google Chrome™.

## New Features

### NetBotz Rack Monitor 250 AOS/APP New Features

- **RADIUS rack access authentication**  
Rack access lock users can now be authenticated using RADIUS. You set rack access RADIUS authentication in the **Configuration > Device > Rack Access > RADIUS** option
- **Support for iCLASS rack access cards**  
The NetBotz 13.56 MHz Handle Kit (NBHN1356) now supports 13.56MHz iCLASS proximity cards.



## Issues Fixed

The following issues were fixed in the NB250 application firmware version 6.4.6:

- RADIUS credentials are now forwarded as expected for users with RADIUS credentials longer than 16 characters.
- Strings starting with the characters " , < , > , or a space are no longer accepted in SNMP and config.ini.
- A delete option was added to the Rack Access user section of config.ini to allow removal of rack access users.
- The Rack Monitor 250 model number, serial number, and hardware revision are now displayed as expected in Factory Information section on the About > Network page.
- The device hostname is now displayed on all web pages.
- Unauthorized SNMPv3 access attempts now appear in the event log.
- When a wireless temperature sensor is offline, the highest allowable negative value, -2147483647, is reported via SNMP.

## Known Issues

### **The NetBotz Rack Monitor 250 requires a firmware update before first use.**

Download the most recent version of the NetBotz Rack Monitor 250 firmware from [apc.com](http://apc.com) or [dcimsupport.apc.com](http://dcimsupport.apc.com). See the Installation and Quick Configuration Manual that came with the product for instructions on how to apply the firmware update.  
See the update instructions on page 4.

### **The NetBotz Wireless Temperature Sensor requires a firmware update before first use.**

Download the NetBotz Wireless Firmware Update Utility from [apc.com](http://apc.com) or [dcimsupport.apc.com](http://dcimsupport.apc.com). Install the utility and view the documentation for information on how to update the wireless sensors on your Rack Monitor 250 wireless network. **Note:** You must update the wireless sensors on one Rack Monitor 250 at a time, using the Coordinator and sensor(s) from its wireless network.  
See the update instructions on page 4.

### **StruxureOn Gateway does not support NetBotz Rack Monitor 250**

The Rack Monitor 250 is not supported in StruxureOn Gateway v1.0.2 and earlier. Support for the Rack Monitor 250 is planned in a future StruxureOn Gateway release.

### **Unplugged sensors in Data Center Expert can be deleted**

NetBotz Rack Monitor 250 alarm generation enabled/disabled sensors reporting as unplugged in Data Center Expert can safely be deleted.  
Humidity sensors reporting as unplugged on temperature-only sensors can also safely be deleted.  
These sensors were erroneously included in the device definition file (DDF), and will be removed in a future version.

### **Update the NetBotz 250 DCE Scanner DDF to a version more recent than version 6.**

Verify the DDF in Data Center Expert in the Device > SNMP Device Communication Settings > Device Definition Files option. Upload a new DDF if it is more recent than version 6. If a DDF more recent than version 6 is not available, contact your local technical support.

### **Communication lost with DCE after firmware update**

When the NetBotz Rack Monitor 250 is monitored using SNMPv3 in Data Center Expert, communication is lost after a firmware update to AOS 6.4.6. This will be addressed in a future AOS version.  
Reboot your Data Center Expert server to resolve the issue. See the APC Knowledge Base article ID FA305661 for details and instructions.

### **Chrome browser connectivity is intermittent**

HTTPS connectivity can be intermittent in newer versions of the Chrome browser (v55 and newer). This is caused by recent adjustments to the TLS cipher suites advertised to web servers in Chrome. Internet Explorer 11 and Firefox browsers are not affected. See the APC Knowledge Base article ID FA307898.



**Rack access devices are not displayed while firmware updates**

Rack access devices are temporarily removed from the user interface during the firmware update. The firmware update for the Rack Monitor 250 happens first, then the update for the rack access devices follows. Once the Rack Monitor 250 firmware update completes, it takes about ten minutes for the rack access devices to reappear in the list. All configured settings remain as expected.

**Unable to communicate with the appliance using the USB console port**

If you are unable to access the appliance using the console port, you may need to install a serial-to-USB driver. The USB vendor is FTDI; the driver type is VCP. Driver downloads are available on the FTDI web site. See the APC Knowledge Base article ID FA158350.

**Limited command line interface (CLI) functionality**

Commands available from the command line are limited to system configuration, such as TCP/IP. Enabling Modbus is the only available application command specific to the Rack Monitor 250. Application commands will be added in a future release.

**Alarm mapping is not available for some sensors**

Alarm mapping is available collectively for any sensor connected to a Sensor Pod 150 (NBPod150) for the beacon only, and not for the switched outlet or output relay.

Alarm mapping is available for rack access door switch sensors connected to Door 1 or Door 2 ports for the beacon only, and not for the switched outlet or output relay.

Door sensors connected to universal ports can be mapped under Input State Sensors by selecting Abnormal State.

Alarm mapping is not available for any wireless sensors.

**Handles used with the Rack Access PX-HID and Sensor Pod 170 are not compatible with the Rack Monitor 250.**

The NetBotz Handle Kits NBHN1356 or NBHN125 are the only handle kits supported by the Rack Monitor 250.

**Door lock cable from the Rack Access PX-HID is not compatible with the Rack Monitor 250.**

The green and white door lock cable from the Rack Access PX-HID (AP9361) is not recognized by the Rack Monitor 250. You must use the cable included with the NetBotz Handle Kit (NBHN1356 or NBHN125). These are the only handle kits and door lock cables supported by the Rack Monitor 250.

**Door contact switches used alone must be connected to universal sensor ports.**

Door contact switches used without the NetBotz Handle Kit must be connected to the universal sensor ports 1 through 6, not the Door Switch 1 and 2 ports.

**Location SNMP OID not available**

The Location SNMP OID is not available in the wireless sensor status table and the wireless sensor configuration table.

**Wired sensor name does not update**

When a wired temperature or temperature/humidity sensor is disconnected, and then reconnected to a different port, the name of the previously connected sensor is displayed. The sensor displays temperature or temperature/humidity values as expected.

**Reboot the appliance after sensors are swapped**

After you disconnect a sensor, and then connect a different type of sensor to that port, you must reboot the Rack Monitor 250 to display the new sensor correctly.

**SNMP OID allows more than 20 characters**

The SNMP OID wirelessSensorConfigName allows more than the 20-character maximum. These sensor names will be truncated in the NetBotz Rack Monitor 250 user interface and other interfaces that enforce the 20-character limit.

**Wireless Sensor Location field displays less than 20 characters**

The Location field for wireless sensors accepts 20 characters, but displays only 16.



**Sensor Pod 150 requires additional time to update firmware**

A firmware update takes an additional 5 minutes for each Sensor Pod 150 connected to the appliance. It can take up to 30 minutes to update a system with 6 Sensor Pod 150 devices.

**Modbus support does not include the wireless sensor network or rack access devices**

In this release, Modbus does not support rack access handle kits and door switches connected to the Door 1 and Door 2 ports, or the devices on the wireless sensor network.

**Data log filter does not list all connected devices**

State sensors do not appear in the data log. Wireless sensors and Sensor Pod 150 devices that do not have at least one numeric sensor do not appear in the Data Log Filtering list.

**Auto Relock alarm occurs when the door is open**

When a rack access handle and door switch are left open for longer than the time specified in the Door Open alarm threshold, the Auto Relock alarm occurs rather than the Door Open alarm.

**Uploading config.ini with 200 rack access users causes reboot**

The management interface reboots when you upload a config.ini file with 200 rack access users. Upload the [AccessPXUser] section separately: upload config.ini without the [AccessPXUser] section, then upload config.ini with only the [AccessPXUser] section.

**Communication established message is not displayed**

The "NB: Communication established" message is not received in SNMP traps and syslog.

**Sensor Pod 150 firmware update progress and status is unclear**

When you connect a Sensor Pod 150 to the appliance, an informational alarm occurs, and error messages are reported on the Home page for connected sensors while its firmware updates. The firmware update for the Rack Monitor 250 happens first, then the update for the Sensor Pod 150 and follows. Once the firmware update for the Sensor Pod 150 finishes, the errors clear and accurate status messages are displayed.

Go to Configuration > Device > NetBotz to view status. **Do not reboot the appliance while the firmware update is in progress.**

**Wireless sensor name change does not update on the Home page**

When the name of a wireless sensor is changed after it has triggered an alarm, its name does not change on the Home page. Once the alarm clears, and the sensor triggers a new alarm, the correct name is displayed on the Home page. The new sensor name is displayed on the Configuration page immediately, as expected.

**The NetBotz Rack Monitor 250 is not a PoE compatible device.**

Do not connect a NetBotz Rack Monitor 250 to a PoE (Power over Ethernet) switch.



## Rack Monitor 250 Update Procedure

You must update the firmware on the Rack Monitor 250 to the most recent version before first use.

**Do not reboot the appliance while the firmware update is in progress.**

1. Download the latest firmware version free from <http://apc.com/tools/download/> or [dcimsupport.apc.com](http://dcimsupport.apc.com). If you have a Windows computer, you can use the firmware executable to upgrade the firmware.

If you have any other type of computer, you must use FTP, SCP, or XMODEM to manually upload each firmware update file to the Rack Monitor 250. You must upload these .bin files one at a time in this order:

1. Boot Monitor (bootmon), equivalent to the BIOS
2. APC Operating System (AOS), the Rack Monitor 250 operating system
3. Application Module, the NetBotz Rack Monitor 250 specific file

For more information about using FTP, SCP, or XMODEM to manually updating the Rack Monitor 250 firmware files, see the User's Guide.

**Note:** Rack access devices are temporarily removed from the user interface during the firmware update.

2. When the update has completed, log in to the Rack Monitor 250 and go to Configuration > Device > NetBotz. Once the status of all connected devices has changed from FW Upgrade to Normal (or Warning or Critical if there is an active alarm), and the rack access devices are displayed as expected, the Rack Monitor 250 is ready for use.

## Wireless Sensor Update Procedure

You must update the firmware for the Wireless Temperature Sensor before first use.

1. Download the NetBotz Wireless Sensor Update Utility from [apc.com](http://apc.com) or [dcimsupport.apc.com](http://dcimsupport.apc.com).

**Note:** The utility is available for Windows only.

2. Remove the plastic cover over the Wireless port. Remove the Coordinator and connect it to a USB port on the computer where you installed the utility.
3. Record the MAC address of the Wireless Temperature Sensor that came with the Rack Monitor 250. Turn the Wireless Temperature Sensor on.
4. Launch the utility from the Windows Start menu.

**Note:** If you are unable to launch the utility, you may need to install a serial-to-USB virtual COM port driver on your computer. The required FTDI driver is available in the drivers folder of the utility.

5. Enter the MAC address of the sensor in the commission list field. If you have more than one wireless sensor, make sure they are all turned on, and add their MAC addresses also.
6. Click OK to start the utility.
7. Browse to the wireless firmware .zip file installed with the utility.
8. Press Apply to update the wireless sensor firmware.
9. When the firmware update is complete, reconnect the Coordinator to the Rack Monitor 250 Wireless port and replace the plastic cover. DO NOT connect the Coordinator to any other USB port on the appliance.

For more information about updating the wireless sensor firmware, see the documentation included with the utility.

## MD5 and SHA Hash Signatures

**MD5 Hash:** 26d578ba1969b30efeddc9373a2e6501

**SHA-1 Hash:** 6093dd986ca70739a0bca2bf5f52b8fd2540b2f5

**SHA-256 Hash:** 9c8ac63b472bf9d938f32f4e143bfb1f6ad31b8263e0633ffc7c584349fd3f7

