

# Installation Manual

**NetBotz®**

**Handle Kit**

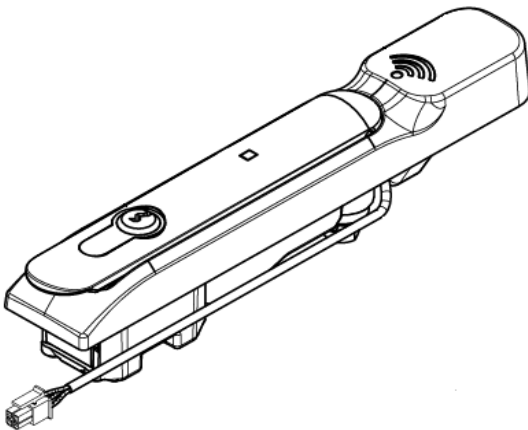
**NBHN1356**

**NBHN125**

**990-9868A-001**

**Publication Date: March 2017**

This handle kit is for use with the NetBotz Rack Monitor 250 (NBRK0250) only.



**APC™**

by Schneider Electric

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# Introduction

The APC by Schneider Electric NetBotz 125 kHz Handle Kit (NBHN125) and NetBotz 13.56 MHz Handle Kit (NBHN1356) are compatible with the NetBotz Rack Monitor 250 only.

You can connect up to two handles to the Rack Monitor 250. Both handles must be the same model, either two 125 kHz handles (840-9084A) or two 13.56 MHz handles (840-9085A).

You can configure up to 200 proximity cards in the Rack Monitor 250 user interface. The proximity card type must be the same for both handles.

**NOTICE:** The Rack Monitor 250 cannot be connected to or networked with any other NetBotz appliances. It uses unique software that is not compatible with other NetBotz products.

## Rack compatibility

This manual provides installation instructions for the following racks:

- NetShelter® SX
- NetShelter SX Colocation rack (AR3200)
- NetShelter SV
- Chatsworth GlobalFrame™ Cabinet

**NOTICE:** For the most recent information on the racks compatible with this product, please check the APC website [www.apc.com](http://www.apc.com) DCIM Support [dcimsupport.apc.com](http://dcimsupport.apc.com) or contact your Schneider Electric representative.

## Additional documentation

Unless otherwise noted, the following documentation is available on the product page on the APC web site, [www.apc.com](http://www.apc.com). To quickly find a product page on the APC web site, enter the product name or part number in the Search field.

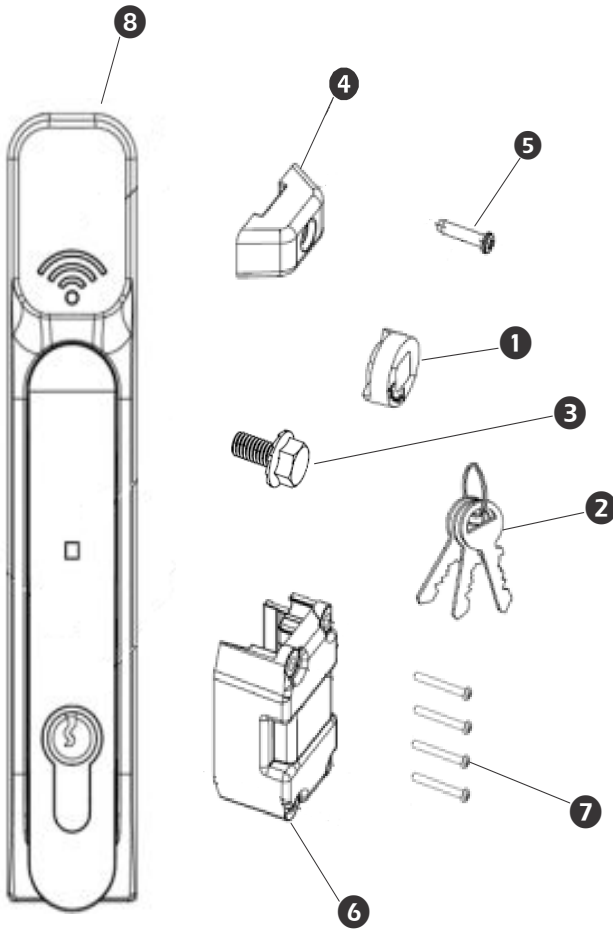
**NetBotz Rack Monitor 250 User's Guide** – Includes all details for using, managing, and configuring the system when using a NetBotz Rack Monitor 250 (NBRK0250).

## Receiving inspection

Inspect the package and its contents for shipping damage and ensure that the parts included in the shipment match all of the parts listed in the inventory table. Immediately report any shipping damage to the shipping agent. Report missing contents, damage, or other problems to APC or your APC reseller.

The shipping materials are recyclable. Please save them for later use, or dispose of them appropriately.

# Inventory



- 
- 1** Rotation limiter
  - 2** Keys
  - 3** Cam screw
  - 4** Top mounting bracket
  - 5** M3x14 Pozidriv<sup>®</sup> mounting screw
  - 6** Bottom mounting bracket
  - 7** M3x25 Pozidriv mounting screw (4)
  - 8** Handle (2)

Not shown:

Cable assembly (2)

Short cam, for use with NetShelter SX (2)

Long cam, for use with NetShelter SV and  
NetShelter SX Colocatoon (AR3200) (2)

Quick disconnect kit

In line RJ45/RJ45 coupler (2)

Wire tie 8x 0.1 x 0.06 inches (20)

CAT5 RJ45M/RJ45M patch cable

HID 125kHz 26 bit proximity card with APC logo,  
included with NBHN125 only (2)

## Additional Options

The following options are available for the NetBotz Rack Monitor 250Wireless Sensor Pod. For more information, contact your APC representative or the distributor from whom you purchased your product.

- NetBotz 3.65-m (12-ft) Door Switch Sensor for APC Racks (NBES0303)
- NetBotz 15.24-m (50-ft) Door Switch Sensor for Rooms or Third Party Racks (NBES0302)
- NetBotz 125 kHz Handle Kit (NBHN125)
- NetBotz 13.56 MHz Handle Kit (NBHN1356)
- Alarm Beacon (AP9324)

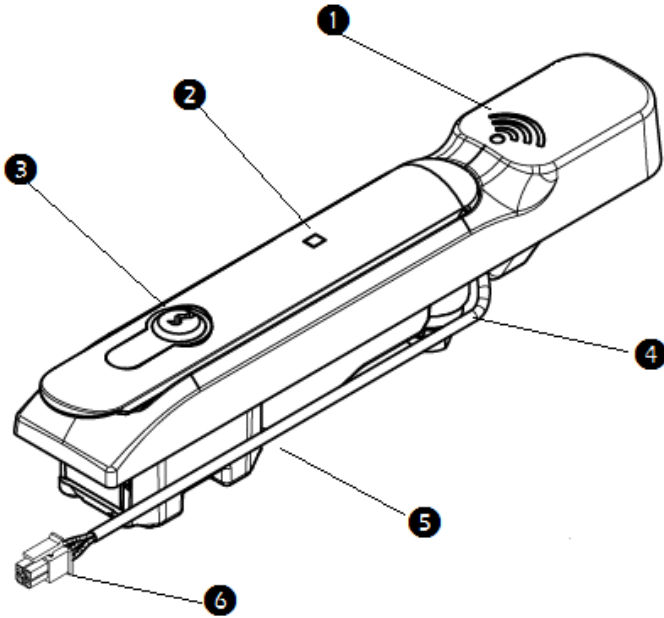
## StruxureWare-certified

This product is certified for use in Schneider Electric StruxureWare for Data Centers systems.

# Installation

## Physical description

Swing handle with proximity reader



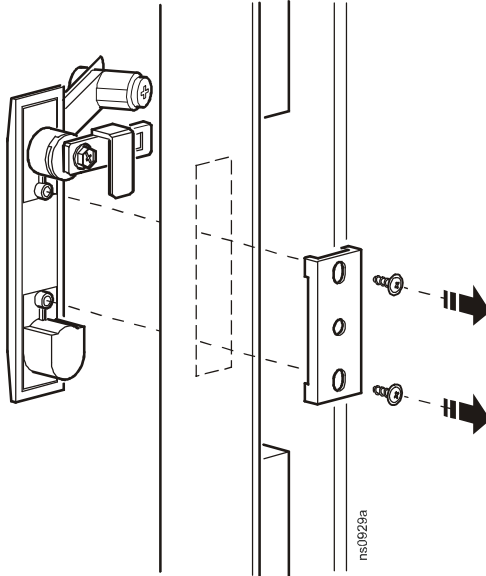
- 
- ❶ Proximity reader
  - ❷ Status LED
  - ❸ Lock plug
  - ❹ Sensor wire
  - ❺ Lock connector port (not shown)
  - ❻ Proximity reader connector



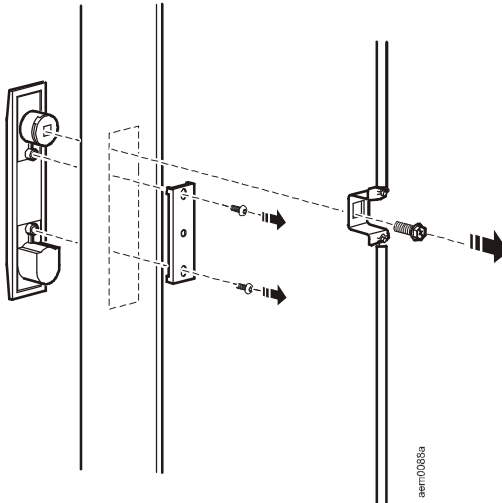
# How to install the NetBotz Handle Kit

Use a #1 Pozidriv® driver to install the handle kit.

## Removing front door handle



## Removing rear door handle



1. Remove the existing rack handle. Remove the cam from the door handle, and save it for step 5.
2. Slide the new handle through the opening in the door.
3. With the swing handle closed, position the rotation limiter (1) with the arrows in the lower right corner for right hand mounting, or in the lower left for left hand mounting. Ensure the swing handle moves toward the inside of the rack in the open position. Reposition the rotation limiter if necessary.
4. Attach the top mounting bracket (4) with the M3x14 Pozidriv® screw (5).
5. Reattach the cam (2) with the cam screw (3).
6. Attach the bottom mounting bracket (6) using four M3x24 Pozidriv® screws (7), with the tab on the right for right hand mounting, or on the left for left hand mounting.

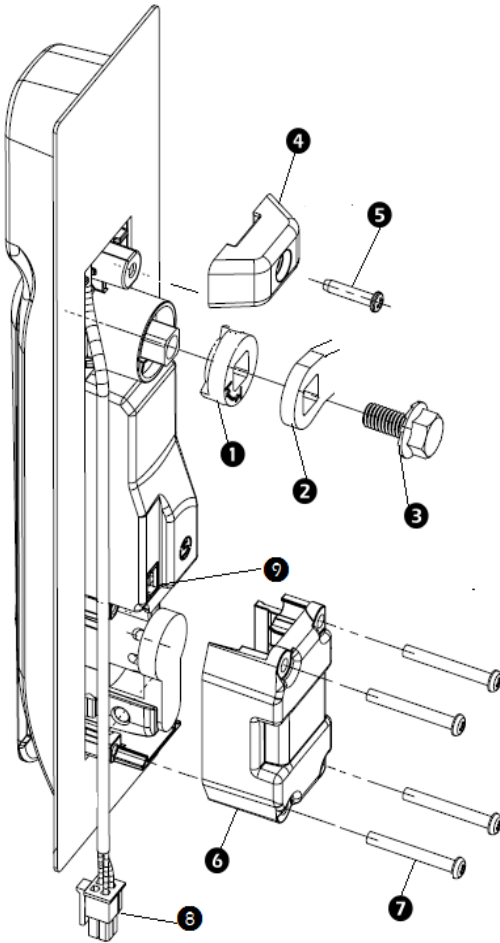
**NOTICE:** Make sure the handle wire is outside the mounting bracket and does not interfere with the latch. **Do not crimp the wire during installation.**

7. Attach the included cable assembly to the proximity reader connector on the handle (8) and the lock connector port (9) on the handle wire. Route the cable assembly through the rack door.

**NOTICE:** Only use the cable assembly that came with the NetBotz Handle Kit.

8. At the hinge between the door and the rack, connect the cable assembly to the RJ45/RJ45 coupler, and then connect the CAT5 cable.
9. Continue routing the CAT5 cable through the rack.
10. Connect the cable to the **Handle 1** or **Handle 2** port on the Rack Monitor 250.

## Installing the handle kit



- 
- 1** Rotation limiter
  - 2** Cam from your rack
  - 3** Cam screw
  - 4** Top mounting bracket
  - 5** M3x14 Pozidriv<sup>®</sup> mounting screw
  - 6** Bottom mounting bracket
  - 7** M3x25 Pozidriv<sup>®</sup> mounting screws (4)
  - 8** Proximity reader connector
  - 9** Lock connector

## Status LEDs

The LED activity on the front of the handle (blue, magenta, red) signifies its status.

LED Activity	Status	Action
Solid blue	<b>Locked</b> The handle is secured, the cam and lock slide are in the locked position.	Normal. Rack is secured.
Flashing blue/magenta	<b>Unlocked electronically</b> The handle is secured, the cam is in the locked position. The lock slide is in the unlocked position.	Normal. Rack can be accessed.
Flashing blue	<b>Unlocked manually</b> The handle is open, or the cam is in the unlocked position.	Normal. Rack can be accessed.
Flashing blue/red Flashing blue/red/red	<b>Handle not fully closed</b> The cam is open.  The cam is closed. The lock slide is not positioned correctly.	Close handle.  Possible tampering or mechanical failure. Call technical support.
Flashing magenta Flashing red/magenta	<b>Lock slide error</b> The lock slide is locked and not responding electronically.  The lock slide is not responding electronically, and was unlocked manually.	Contact technical support.
Solid blue	<b>Unlocked electronically</b> The handle is secured, the cam is in the locked position. The lock slide is in the unlocked position.	Normal. Rack is secured.

## How to configure rack access proximity cards

You must access the Rack Monitor 250 user interface to configure proximity cards.

The Rack Monitor 250 with the NetBotz 125 kHz Handle Kit (NBHN125) supports the following 125kHz proximity cards:

- H10301 26-bit
- H10302 - 37 bit
- H10304 - 37bit with facility code
- CORP-1000

The Rack Monitor 250 with the NetBotz 13.56 MHz Handle Kit (NBHN1356) supports the following 13.56MHz proximity cards:

- MIFARE Classic 4-byte UID
- MIFARE Classic 7-byte UID
- MIFARE DESFIRE
- MIFARE PLUS
- iCLASS

To register a new proximity card:

1. Go to **Configuration > Device > Rack Access > Lock Properties** in the Rack Monitor 250 user interface.
2. Check the box to enable the card reader. Specify the card type for the installed handle(s), the auto-relock time (10 - 60 seconds), and the time to wait before the door open alarm is activated for Door 1, Door 2, or both (1 - 120 minutes). Click **Apply**.
3. Hold the card in front of the proximity reader on the handle until you hear a beep.
4. Go to **Configuration > Device > Rack Access > Unregistered Users**.
5. Click the card ID number to specify the user name, door access (Door 1, Door 2, or both), the access schedule (24 x 7 by default), and enable account access.
6. Click **Apply**.

To view, modify, or delete registered users, go to **Configuration > Device > Rack Access > Registered Users**.

To enable RADIUS rack access authentication, go to **Configuration > Device > Rack Access > RADIUS**.

For information about configuring rack access, see the NetBotz Rack Monitor 250 User's Guide.

# Installation—Accessories

## Door switch sensor (optional)

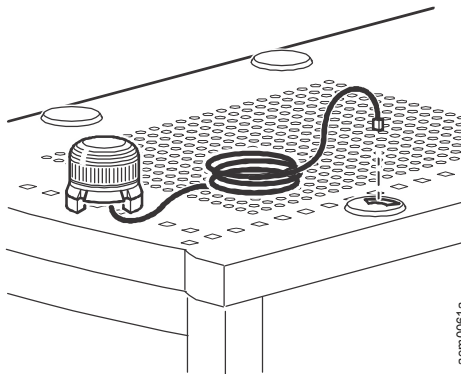
1. Choose a location at the top of the rack to install the door switch and door switch magnet.
2. Connect the door switch to the enclosure frame.
3. Connect the door switch cable to the **Door Switch 1** or **Switch 2** port on the Rack Monitor 250.
4. Connect the door switch magnet to the enclosure door.

For more information, see the installation sheet that came with your door switch sensor (NBES0302 or NBES0303).

## Alarm beacon (optional)

1. Install the alarm beacon in a visible position either on the roof of the enclosure or inside the enclosure. The beacon has a magnetic base.

If you install the beacon on the roof, route its cable through the provided holes, as shown.



aem0061a

2. Connect the cable to the **Beacon** port on the Rack Monitor 250.

You can extend the cable to a maximum of 330 ft (100 m) using RJ-45 couplings and standard CAT5 cables.

# Specifications

## Electrical

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### Lock

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Supply voltage (Vsupply)	12VDC to 24 VDC
Standby current	50mA maximum at 12VDC
Operating current	200mA maximum at 12VDC (with no external mechanical load)
Stall current	1A maximum at 12VDC (limited to 2 seconds)
Operating transit time	1 second maximum (with power present)
Electronic unlock time	3 seconds minimum
Open collector outputs	Rated for Vsupply maximum load

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### Proximity reader

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Supply voltage (Vcc)	12VDC to 24 VDC
Operating current	20mA maximum at 12VDC (with no external devices)
Transmit frequency	125kHz FSK
DATA signal voltage	5VDC
DATA pulse interval time	40 $\mu$ s
DATA signal delay	2ms

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### Handle

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Maximum length of CAT5 sensor cable	100 m (330 ft)
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## Specification, continued

### Environmental

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Operating temperature	0 to 45°C (32 to 113°F)
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### Physical

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Dimensions (H x W)	212.6 x 37.0mm (8.37 x 1.45 in)
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Shipping dimensions (H x W x D)	78.7 x 222.3 x 139.7 mm (3.1 x 8.75 x 5.5 in)
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Weight	0.4 kg (0.9 lb)
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Shipping weight	0.7 kg (1.5 lb)
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# Compliance

## FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**FCC Caution:** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and
2. This device must accept any interference received, including interference that may cause undesired operation.

**RF Exposure Warning:** The equipment complies with RF exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

## Canada

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques," NMB-003 édictée par l'Industrie.



## Two Year Limited Factory Warranty

Schneider Electric IT Corporation (SEIT), warrants its products to be free from defects in materials and workmanship for a period of two (2) years excluding the batteries. The SEIT obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products. Repair or replacement of a defective product or parts thereof does not extend the original warranty period.

This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase. Products may be registered online at [warranty.apc.com](http://warranty.apc.com).

SEIT shall not be liable under the warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by end user's or any third person's misuse, negligence, improper installation, testing, operation or use of the product contrary to SEIT's recommendations or specifications. Further, SEIT shall not be liable for defects resulting from: 1) unauthorized attempts to repair or modify the product, 2) incorrect or inadequate electrical voltage or connection, 3) inappropriate on site operation conditions, 4) Acts of God, 5) exposure to the elements, or 6) theft. In no event shall SEIT have any liability under this warranty for any product where the serial number has been altered, defaced, or removed.

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To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from customer support. Customers with warranty claims issues may access the SEIT worldwide customer support network through the SEIT Web site: [www.apc.com](http://www.apc.com). Select your country from the country selection drop down menu. Open the Support tab at the top of the web page to obtain information for customer support in your region. Products must be returned with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase.

## Obtaining service

To obtain support for problems with your NetBotz Handle Kit:

1. Contact Customer Support using the information on the back cover of this manual. A technician will try to help you solve the problem by phone.
2. If you must return the product, the technician will give you a return material authorization (RMA) number. If the warranty expired, you will be charged for repair or replacement.
3. Pack the unit carefully. The warranty does not cover damage sustained in transit. Enclose a letter with your name, address, RMA number and daytime phone number; a copy of the sales receipt; and a check as payment, if applicable.
4. Mark the RMA number clearly on the outside of the shipping carton.
5. Ship by insured, prepaid carrier to the address provided by the Customer Support technician.





# APC Worldwide Customer Support

Customer support for this or any other APC product is available at no charge in any of the following ways:

- Visit the APC Web site to access documents in the APC Knowledge Base and to submit customer support requests.
  - **www.apc.com** (Corporate Headquarters)  
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
  - **www.apc.com/support/**  
Global support searching APC Knowledge Base and using e-support.
- Contact the APC Customer Support Center by telephone or e-mail.
  - Local, country-specific centers: go to **www.apc.com/support/contact** for contact information.

For information on how to obtain local customer support, contact the APC representative or other distributors from whom you purchased your APC product.

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