



## SmartLock with DX2-DH2C2

**Model Number: DX2-DH2C2**

Raritan's SmartLock is an electronic door access and control system for all types of data center enclosures.


### Supported Components

DX2-DH2C2 door handle controller supports the following components:

<b>PDU</b>	PX3	
	PX3TS	
	PXC	
	SRC	
	Legrand PDU	
<b>Xerus</b>	3.4.20 and up	
<b>Door Handles</b>	Southco H3-EM-60-100	Emka Agent E
	Southco H3-EM-62-100	Emka 1150-U5x
	Southco H3-EM-64-100	Dirak MLR1000
	Southco H3-EM-65-100	Dirak MLR2X00
	Southco H3-EM-66-100	
	Southco H3-EM-67-100	
	Southco H3-EM-68-100	

### Restrictions for DX2-DH2C2

- Max. of 1 DX2-DH2C2 with up to 2 electronic door handles per PX3 Sensor port
- Max. cable length PDU to DX2-DH2C2: 5m
- Max. cable length DX2-DH2C2 to door handle: 4m
- No support for hot-plugging door handles. Door handle must not be plugged or unplugged from DX2-DH2C2 while contacts are

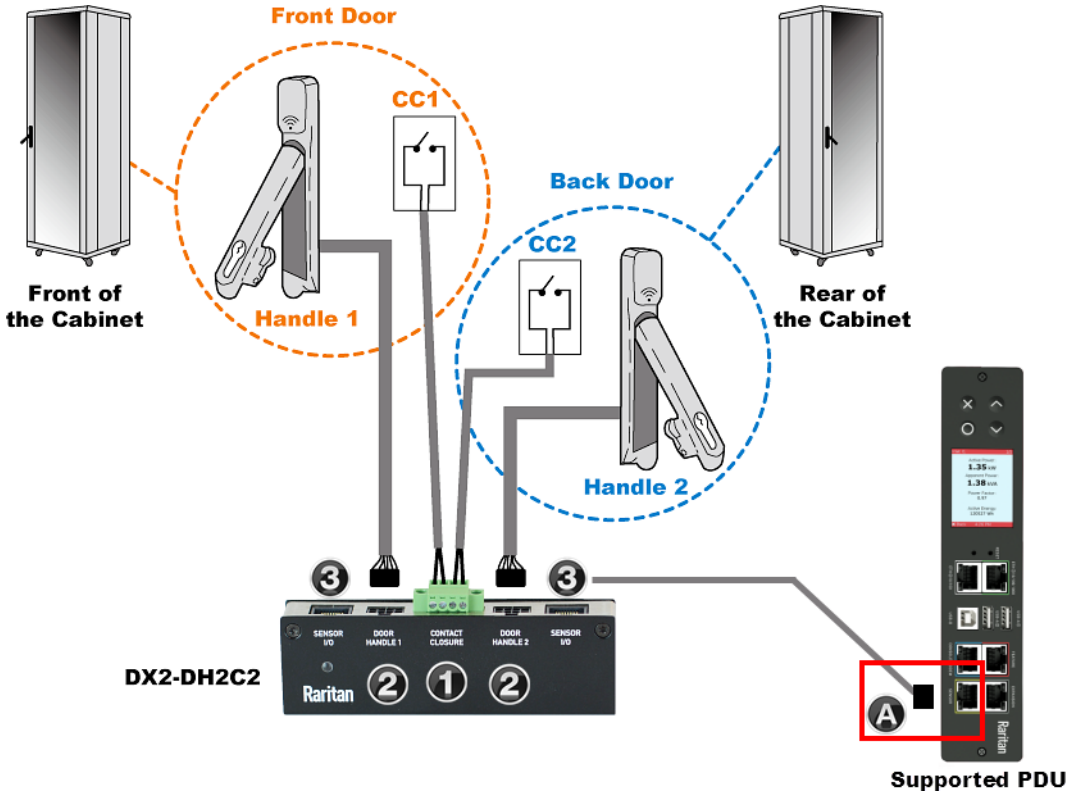
powered.  Risk of equipment damage.

### More Info

Raritan Product Support:

<https://www.raritan.com/support/product/px3>

## DX2-DH2C2 Installation

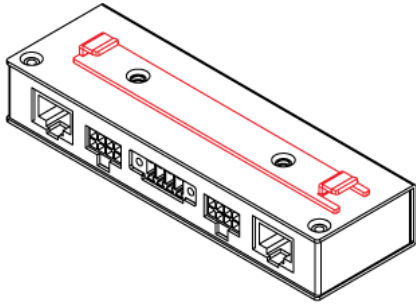


<b>3</b>	<p><b>SENSOR I/O</b> RJ-45 ports Use a standard category cable to connect to the PX3, PX3TS, PXC, SRC, or Legrand PDU Sensor Port: <b>A</b></p>
<b>2</b>	<p><b>DOOR HANDLE 1 - DOOR HANDLE 2</b> Electronic door handle ports Use wiring provided with your door handles. Connect the 8-pin connector end to the door handle port.</p>
<b>1</b>	<p><b>CONTACT CLOSURE</b> Contact closure sensor channels CC sensors and wiring not included. Connect CC sensors according to their instructions.</p>

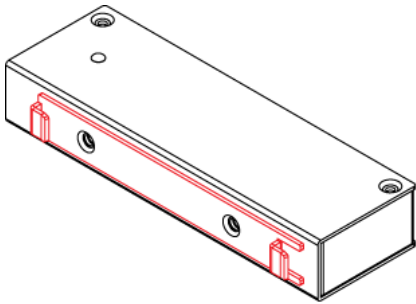
## Bracket Installation

You can install the bracket accompanying DX2-DH2C2 in order to hang or fasten it properly on an object or position. The bracket can be installed either onto the bottom of DX2-DH2C2 or onto one of its sides.

- ▶ Bracket installed onto DX2-DH2C2's bottom:



- ▶ Bracket installed onto the side of DX2-DH2C2:



## Next Steps

Once the physical connections are complete, login to your PX PDU to use door handle features in the web interface.

## Web Configuration

### Peripherals

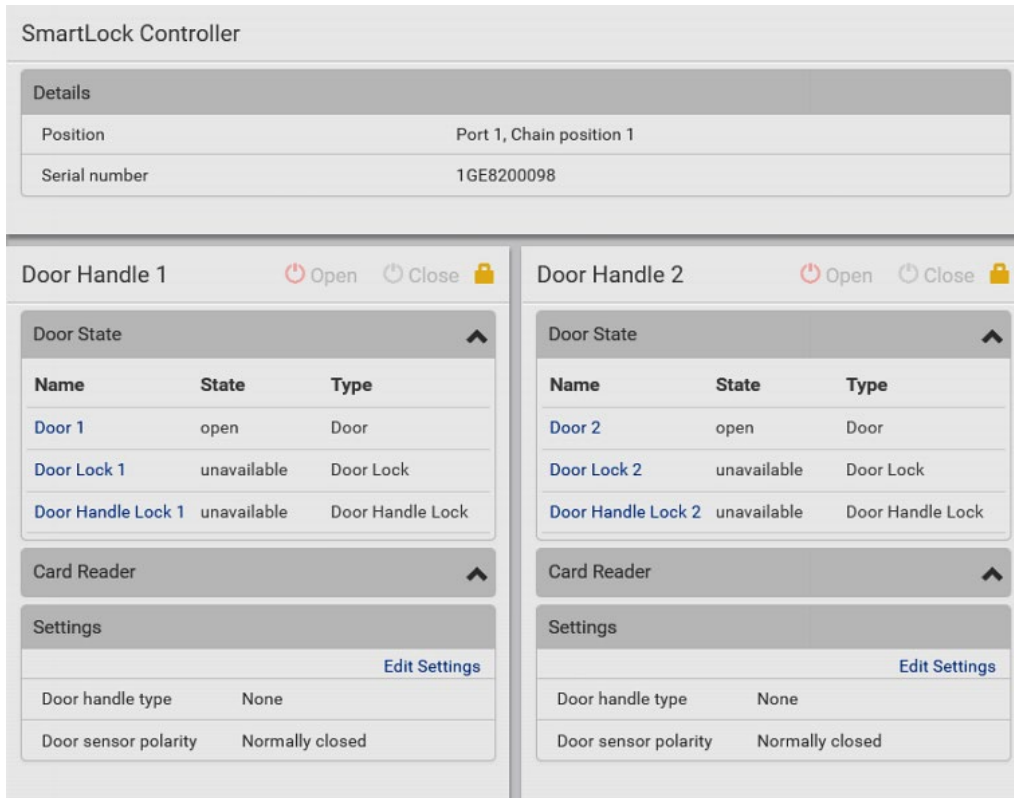
- Click Peripherals in the Main menu to view the sensors that have been discovered. Upon discovery, the Main menu also adds two new menu options: SmartLock and Card Readers.
- In the Peripheral Devices page, two door handles, door locks, and doors are added automatically.

Dashboard		Peripheral Devices <span style="float: right;">✎ ⋮</span>						
# ▲	Name	Reading	State	Type	Serial Number	Position	Actuator	
1	Door 1		unavailable	Door	1GE8200068			
2	Door 2		unavailable	Door	1GE8200068			
3	Door Lock 1		unavailable	Door Lock	1GE8200068			
4	Door Lock 2		unavailable	Door Lock	1GE8200068			
5	Door Handle Lock 1		unavailable	Door Handle Lock	1GE8200068		✓	
6	Door Handle Lock 2		unavailable	Door Handle Lock	1GE8200068		✓	

### SmartLock

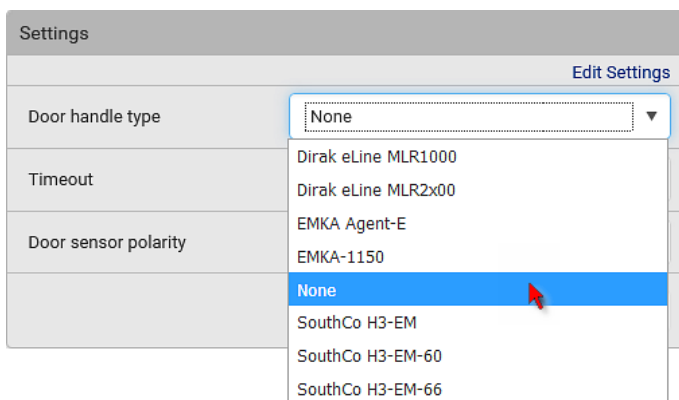
- Click Smart Lock in the Main menu to open the Door Handle options.
- Smart Lock Controller section on top displays the physical connection to the DX2-DH2C2.

- Door Handle 1 and Door Handle 2 correspond to the labels on the sensor.



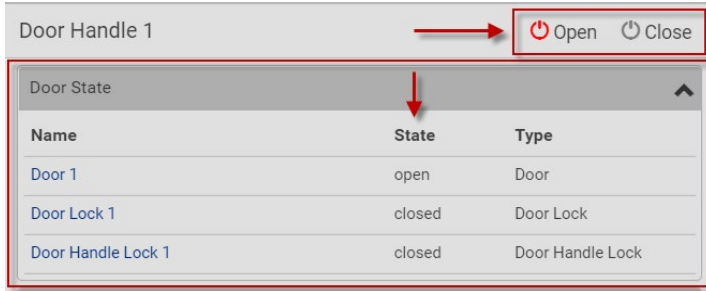
## Settings

- Click Edit settings.
- Door Handle Type: Select your door handle's model.
  - If your specific Southco H3-EM model is listed, select it. For all other supported Southco H3-EM models, select "Southco H3-EM".



- Timeout: Specify how long the **door handle lock** can remain open after someone opens the door handle via a smart card or via remote control using the software. When the timeout expires, the door handle lock will be automatically closed. Default is 600 seconds (that is, 10 minutes).
- Door Sensor Polarity: Determine which of the following status is considered normal for door locks.
  - Normally closed: When the door lock is closed, it is considered normal. This is the default.
  - Normally open: When the door lock is opened, it is considered normal.
- Save your changes.

- Once the Door Handle State and Type is detected, the information populates in Door state section.



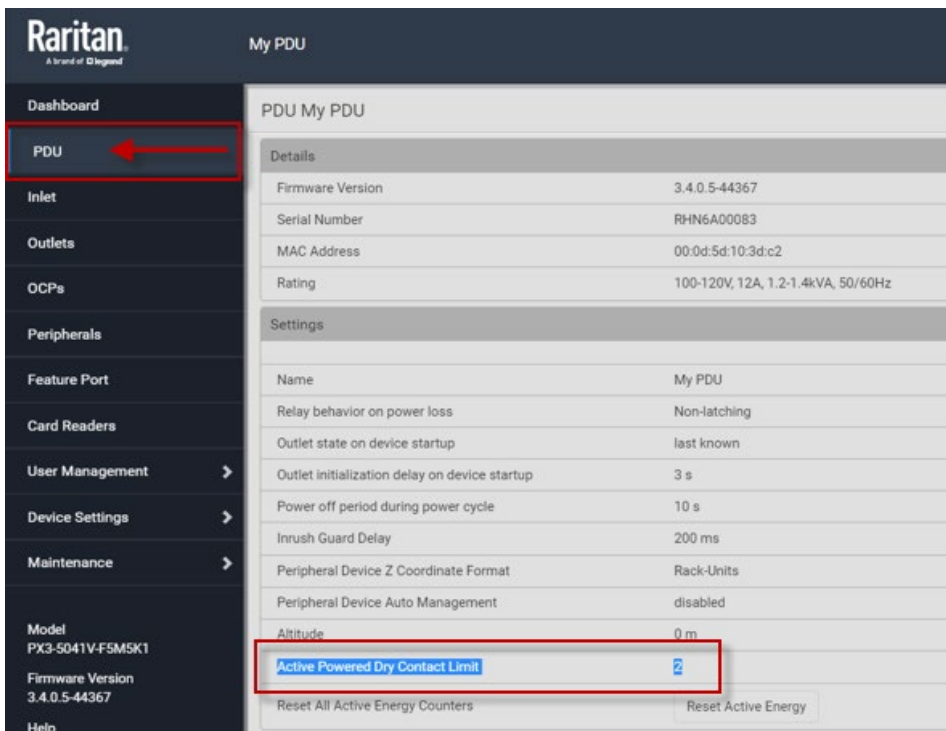
- Optional: You can rename each Door Handle component by clicking the item and editing settings.
- After these configurations, return to the Peripherals Devices page. This page now displays state, type and Position options for each configured component.

# ▲	Name	Reading	State	Type	Serial Number	Position	Actuator
1	Door 1		open	Door	1GE8200068	Port 1, Chain Position 1, Channel 1	
2	Door 2		unavailable	Door	1GE8200068		
3	Door Lock 1		closed	Door Lock	1GE8200068	Port 1, Chain Position 1, Channel 1	
4	Door Lock 2		unavailable	Door Lock	1GE8200068		
5	Door Handle Lock 1		closed	Door Handle Lock	1GE8200068	Port 1, Chain Position 1, Channel 1	✓
6	Door Handle Lock 2		unavailable	Door Handle Lock	1GE8200068		✓

### Optional Setting: Unlock Front and Rear Doors Simultaneously

By default, the PDU configuration is set to unlock only one lock at a time to preserve power. You must change the Active Powered Dry Contact Limit to 2 if you require unlocking the front and rear door simultaneously at the rack.

- Click PDU in the Main menu. Click Edit and change the setting as shown.



## Power IQ Integration

If you are integrating SmartLock with Power IQ, you will need to do additional configurations to complete integration.

Power IQ relies on traps sent by your PDU to get the card reset events. Configure your PDU to forward card reader management related events to Power IQ. See the online help for your PDU for further instructions on SNMP Settings and Event Rule Settings.

Once the configurations described in this guide are complete, Power IQ will have the required infrastructure support to implement a solution with card authorization for unlocking cabinet doors. The following additional configurations are required on Power IQ to accomplish this:

- Card Access Management: Add and assign cards to users
- Add PDUs in Power IQ
- Data Center (EDM) association of PDU, Rack, and Door
- Door Access Management: Associating the card reader to the rack and user authorization

See the Power IQ help for further instructions: <https://www.sunbirdcim.com/>

## SmartLock Kits

<p>SML-KIT-01:            (2) Electronic door handles (HANDLE-E)            (1) Contact Closure Sensor with powered contacts (DX-PD2C5)            (2) Mechanical override keys            Cables and connectors included</p>	<p>SML-KIT-SCO-67-2D:            (2) Electronic door handles (SML-SCO-H3EM-67)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>
<p>SML-KIT-CARD-01:            SML-KIT-01 packaged with Smart Card reader            SML-HFC-READER: (1) USB Modular RFID Card reader with USB cable and mounting bracket and screws</p>	<p>SML-KIT-EKA-AGE-1D:            (1) Electronic door handle (SML-EKA-AGENT-E)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>
<p>SML-KIT-SCO-60-2D:            (2) Electronic door handles (SML-SCO-H3EM-60)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>	<p>SML-KIT-EKA-AGE-2D:            (2) Electronic door handles (SML-EKA-AGENT-E)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>
<p>SML-KIT-SCO-66-1D:            (1) Electronic door handle (SML-SCO-H3EM-66)            (1) Electronic door handle (SML-SCO-H3EM-60)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>	<p>SML-KIT-EKA-AGE-1DL:            (1) Electronic door handle (SML-EKA-AGENT-E-L)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>
<p>SML-KIT-SCO-66-2D:            (2) Electronic door handles (SML-SCO-H3EM-66)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>	<p>SML-KIT-EKA-AGE-2DL:            (2) Electronic door handles (SML-EKA-AGENT-E-L)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>
<p>SML-KIT-SCO-67-1D:            (1) Electronic door handle (SML-SCO-H3EM-67)            (1) Electronic door handle (SML-SCO-H3EM-60)            (1) Contact Closure Sensor with powered contacts (DX2-DH2C2)            (2) Mechanical override keys            Cables and connectors included</p>	