

Super Skybox MA02

User Manual V1.0 — 2025.11.13



Table Of Contents

1. Introduction	3
2. Installing Super Skybox	3
3. Using the Super Skybox local web interface for provisioning	
a. Adding devices on platform	4
b. Auto discover connections	4
c. Manually adding a device	5
d. Discover BACnet data points in device	7
e. Adding data points in a Modbus device	10
4. Super SkyBox data on DREAM	11

Introduction

This document contains a brief description of the SkyCentrics Super SkyBox functionality and provides instructions for getting started. Please contact SkyCentrics if you have any questions while working through this guide.

The Super SkyBox is designed to operate as a gateway enabling seamless data collection and control-logic execution for various Building Automation (BAS) and Building Management (BMS) systems (including at the equipment level) using protocols such as BACnet and Modbus.

Installing Super Skybox

To connect the Super SkyBox to a local network, simply

- (1) Mount the Super SkyBox in a utility closet or network cabinet
- (2) Connect the Super SkyBox to a network switch that is connected to the local network using a Cat6 Ethernet cable
- (3) Power it on with the provided power supply. Both red and green LEDs should turn on and start blinking.

By default, the Super SkyBox obtains an IP address from the local DHCP server. The S/N serial number on the label specifies its MAC address which can be used to identify it on the network.

MA02-WBNA (Cellular Super SkyBox)

Upon power-up, the Super SkyBox establishes an encrypted connection over the 4G LTE network to SkyCentrics' servers, enabling secure, bidirectional communication for data transmission and control signals.

MA02 (Ethernet Super SkyBox)

Upon power-up, the Super Skybox establishes an encrypted connection via Ethernet cable to communicate securely with SkyCentrics' servers.

Using the Super Skybox local web interface for provisioning

The web interface can be accessed at https://IP_address/app (provided you are on the same network)

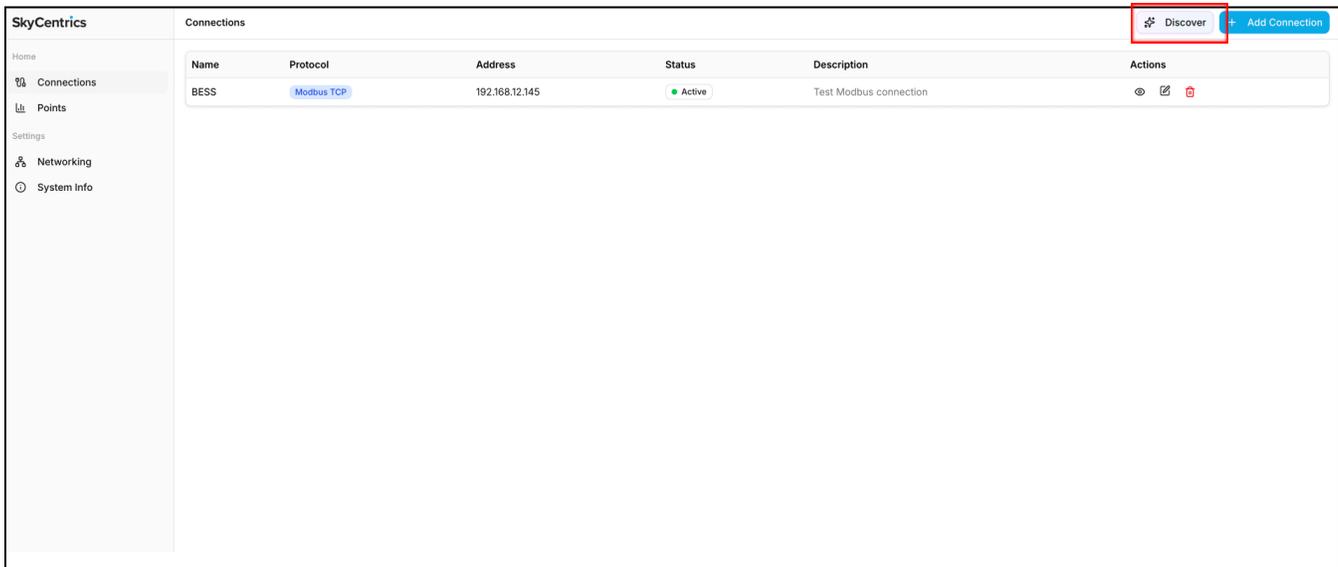
Adding devices on the platform

In Super Skybox, devices on the network are collectively referred to as **connections**.

There are two ways to add connections:

1. **Automatic Discovery:** Super Skybox can automatically detect and list BACnet devices on your network.
2. **Manual Addition:** You can manually add BACnet or Modbus devices using the Add Connection option.

Auto discovering Connections



To discover BACnet devices on your network, navigate to the Connections tab and click the Discover Devices button located at the top-right corner of the page. Allow Super Skybox a few seconds to scan your network and display the detected devices on the page.

SkyCentrics		Connections					Discover	+ Add Connection
Name	Protocol	Address	Status	Description	Actions			
Belimo_demokit_2	BACnet IP	192.168.12.220	Active	Auto-discovered BACnet device - BELIMO Automation AG	👁	✎	🗑	
BensServerTest	BACnet IP	192.168.12.145	Active	Auto-discovered BACnet device - BACpypes	👁	✎	🗑	
BESS	Modbus TCP	192.168.12.145	Active	Test Modbus connection	👁	✎	🗑	

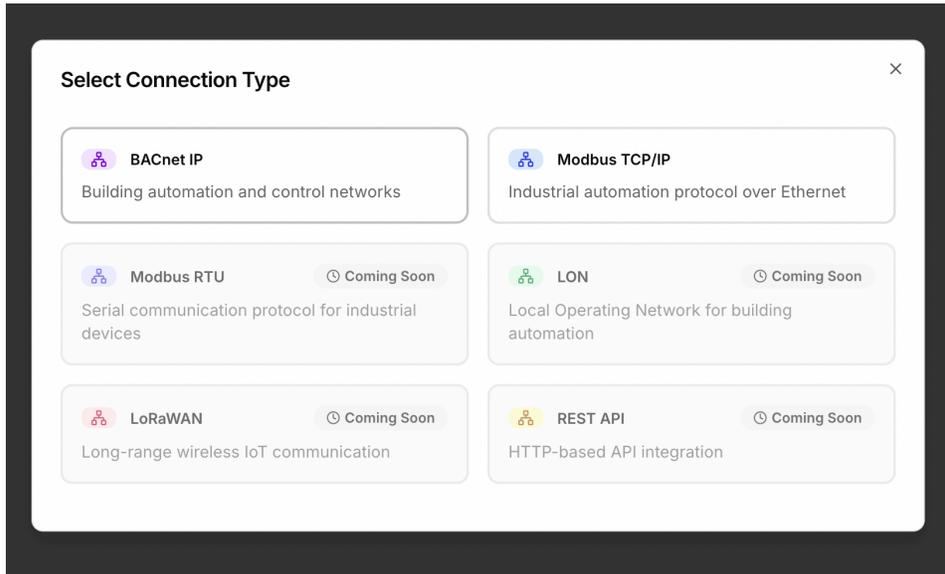
Manually Adding Devices

To manually add a device, follow these steps:

1. Click on **+ Add Connection**.

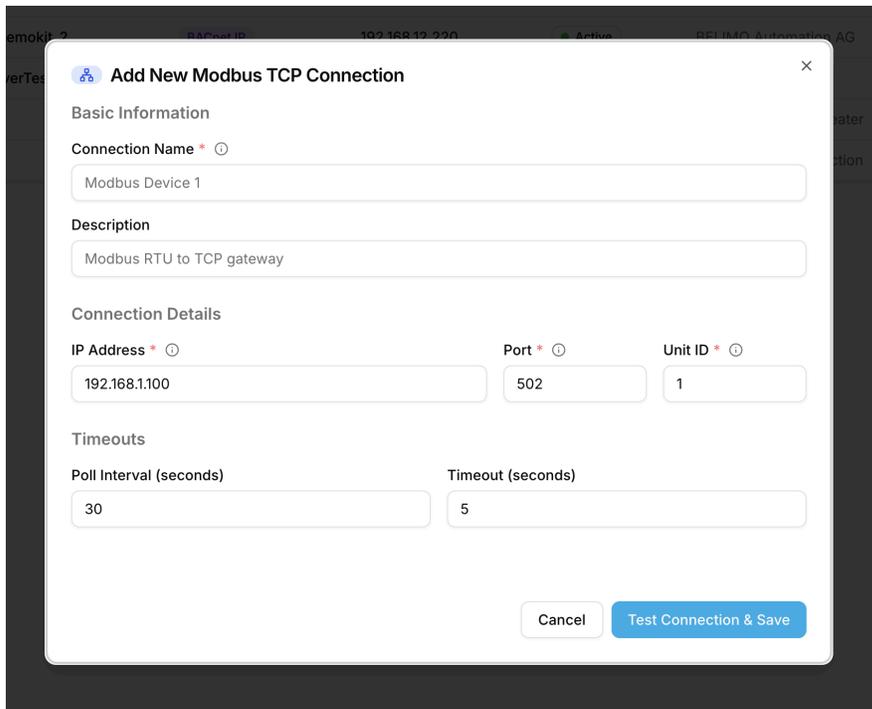
SkyCentrics		Connections					Discover	+ Add Connection
Name	Protocol	Address	Status	Description	Actions			
BESS	Modbus TCP	192.168.12.145	Active	Test Modbus connection	👁	✎	🗑	

- Select the communication protocol used by the device: Modbus or BACnet.



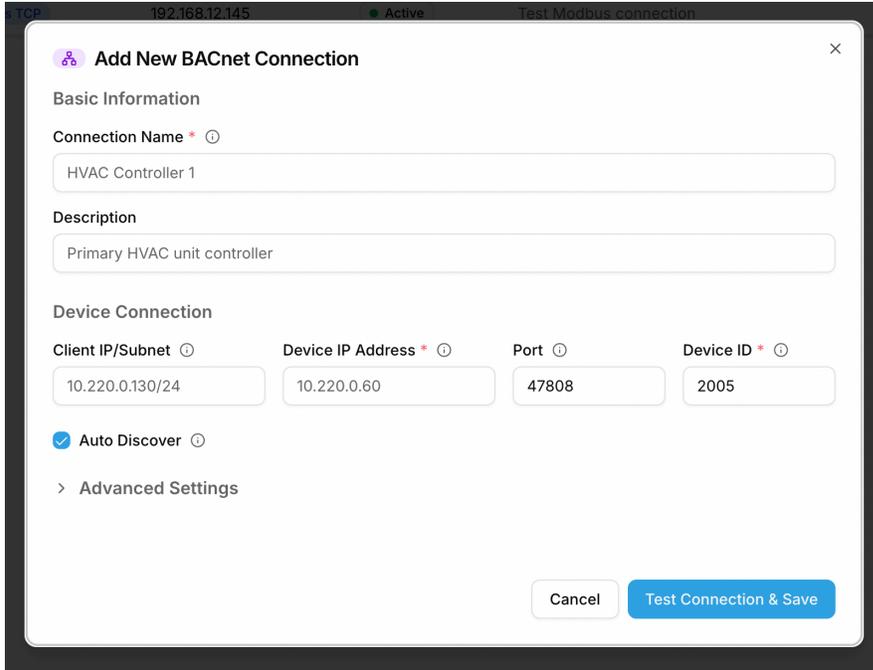
For Modbus connections:

- Enter a connection name and description
- Provide the device’s IP address, port number (typically 502), and unit ID.



For BACnet connections:

1. Enter a name and description for the BACnet connection.
2. Then, provide the target address, port (typically **47808**), and device ID.



The screenshot shows a dialog box titled "Add New BACnet Connection" with a close button (X) in the top right corner. The dialog is divided into several sections:

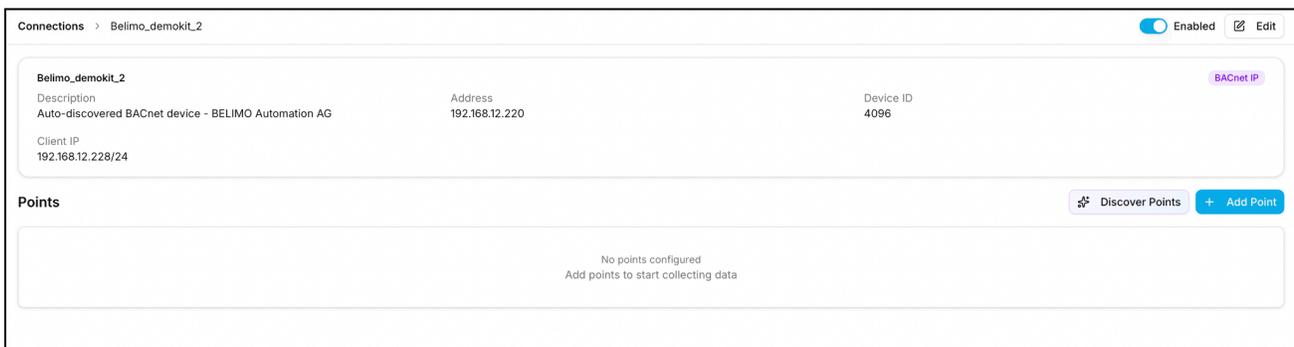
- Basic Information:**
 - Connection Name *** (required): Input field containing "HVAC Controller 1".
 - Description:** Input field containing "Primary HVAC unit controller".
- Device Connection:**
 - Client IP/Subnet:** Input field containing "10.220.0.130/24".
 - Device IP Address *** (required): Input field containing "10.220.0.60".
 - Port:** Input field containing "47808".
 - Device ID *** (required): Input field containing "2005".
- Auto Discover:** A checked checkbox.
- Advanced Settings:** A link with a right-pointing chevron (>).

At the bottom of the dialog, there are two buttons: "Cancel" and "Test Connection & Save".

Next, click on the **Test and Save Connection** button.

This will attempt to communicate with the device to verify that it is reachable on the network and that the selected protocol is correct. If the device is offline/ not yet installed, this test would fail. Click on 'Save anyway', so that the device is added to the list and can be tested later

Discover BACnet data points in device



The screenshot shows the "Connections" page in a web interface. The breadcrumb path is "Connections > Belimo_demokit_2". In the top right corner, there is a toggle switch for "Enabled" (which is turned on) and an "Edit" button.

The main content area displays details for the connection "Belimo_demokit_2":

- Description:** Auto-discovered BACnet device - BELIMO Automation AG
- Address:** 192.168.12.220
- Device ID:** 4096
- Client IP:** 192.168.12.228/24

At the bottom of the connection details, there are two buttons: "Discover Points" and "Add Point".

Below the connection details, there is a section titled "Points". It contains the text: "No points configured. Add points to start collecting data".

The network scan automatically triggers the discovery of data points for each detected connection. You can also manually start this process by using the **Discover Points** button within the connection page.

The discovered points are displayed as shown. By default, most points are disabled for cloud transmission. To enable a point for cloud publishing, simply check the corresponding box, that data point will then be included in the data sent to the cloud. (Image will be shared soon)

Connections > Belimo_demokit_2 Enabled Edit

Belimo_demokit_2 BACnet IP

Description: Auto-discovered BACnet device - BELIMO Automation AG Address: 192.168.12.220 Device ID: 4096

Client IP: 192.168.12.228/24

Points Discover Points + Add Point

Object Type	Instance	Name	Zone	Room	Unit	Status	Actions
analogInput	1	RelPos	-	-	%	Enabled	 
analogInput	2	AbsPos	-	-	°	Enabled	 
analogInput	6	SpAnalog	-	-	%	Enabled	 
analogInput	20	S1	-	-	-	Enabled	 
analogInput	21	S2	-	-	-	Enabled	 
binaryInput	101	SummaryStatus	-	-	-	Enabled	 
analogOutput	1	SpRel	-	-	%	Enabled	 

You can also manually add data points by clicking on the **+ Add Point** button.

Connections > Belimo_demokit_2 Enabled Edit

Belimo_demokit_2 BACnet IP

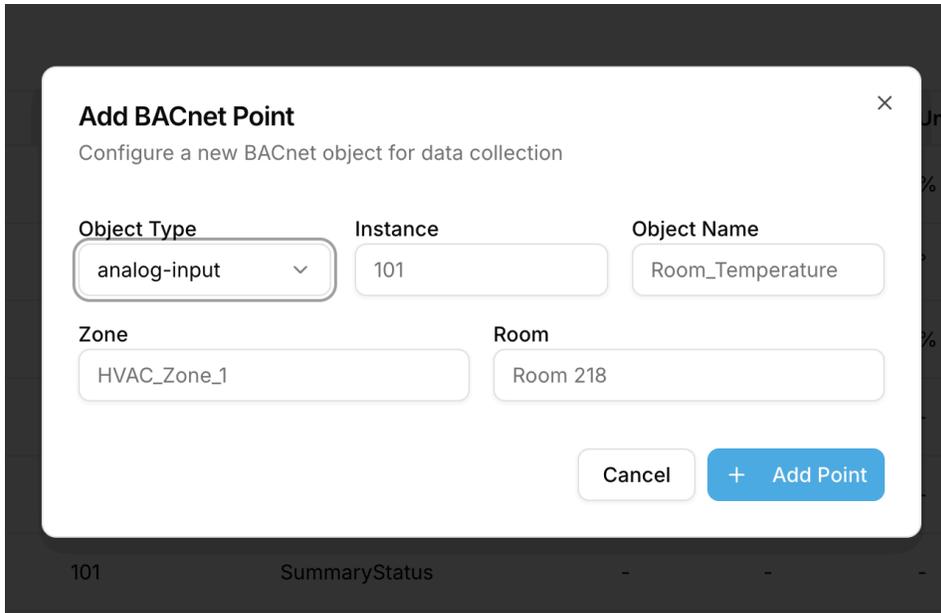
Description: Auto-discovered BACnet device - BELIMO Automation AG Address: 192.168.12.220 Device ID: 4096

Client IP: 192.168.12.228/24

Points Discover Points + Add Point

Object Type	Instance	Name	Zone	Room	Unit	Status	Actions
analogInput	1	RelPos	-	-	%	Enabled	 
analogInput	2	AbsPos	-	-	°	Enabled	 
analogInput	6	SpAnalog	-	-	%	Enabled	 
analogInput	20	S1	-	-	-	Enabled	 
analogInput	21	S2	-	-	-	Enabled	 

You can specify the **Object Type**, **Instance**, and **Name**, along with optional details such as **Room** and **Zone**.



Add BACnet Point ✕

Configure a new BACnet object for data collection

Object Type: analog-input (dropdown) Instance: 101 Object Name: Room_Temperature

Zone: HVAC_Zone_1 Room: Room 218

Buttons: Cancel, + Add Point

Background table snippet: 101 SummaryStatus - - -

Rooms and Zones can also be added to automatically discovered points by editing their information. To do this, click the pencil icon highlighted below:

Connections > Belimo_demokit_2 Enabled Edit

Belimo_demokit_2 BACnet IP

Description: Auto-discovered BACnet device - BELIMO Automation AG Address: 192.168.12.220 Device ID: 4096

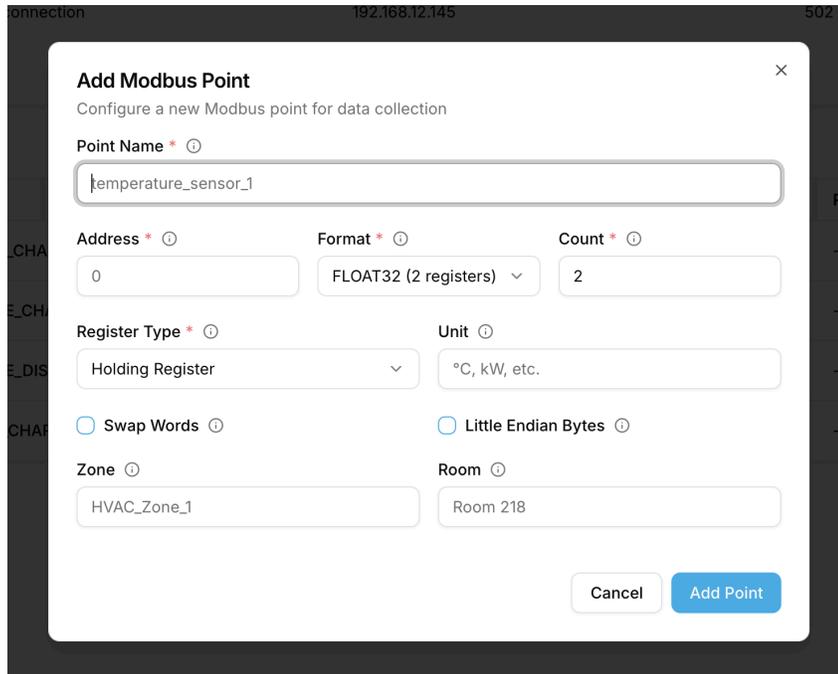
Client IP: 192.168.12.228/24

Points Discover Points + Add Point

Object Type	Instance	Name	Zone	Room	Unit	Status	Actions
analogInput	1	RelPos	-	-	%	Enabled	✎ 🗑️
analogInput	2	AbsPos	-	-	°	Enabled	✎ 🗑️
analogInput	6	SpAnalog	-	-	%	Enabled	✎ 🗑️
analogInput	20	S1	-	-	-	Enabled	✎ 🗑️
analogInput	21	S2	-	-	-	Enabled	✎ 🗑️

Adding data points in a Modbus device

Open the Modbus connection and click the **+ Add Points** button. Enter details such as **Name**, **Register Address**, **Format**, **Register Type**, and other Modbus settings, then click **Add Point** to save.



Add Modbus Point ✕

Configure a new Modbus point for data collection

Point Name * ⓘ

Address * ⓘ Format * ⓘ Count * ⓘ

Register Type * ⓘ Unit ⓘ

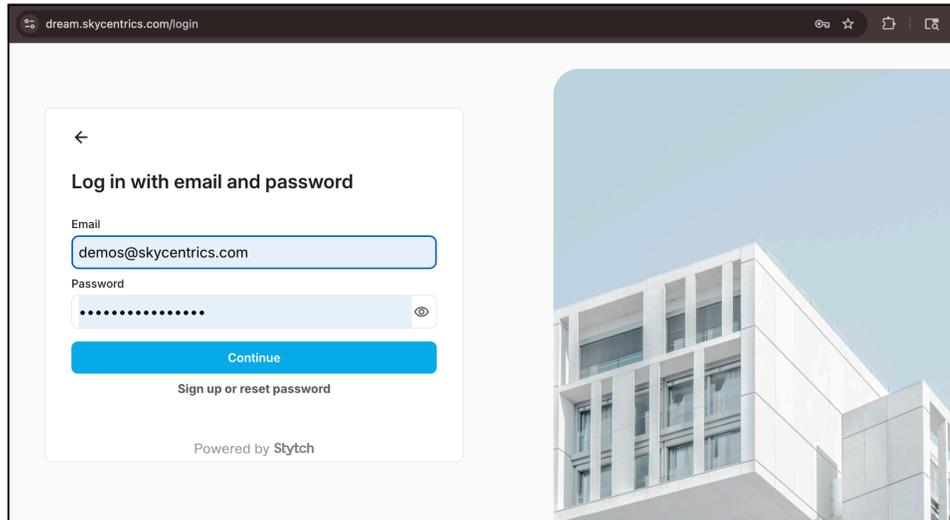
Swap Words ⓘ Little Endian Bytes ⓘ

Zone ⓘ Room ⓘ

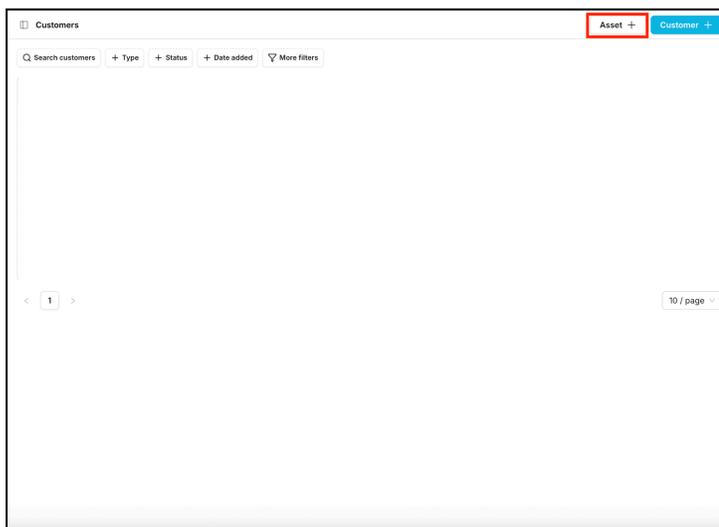
Now, you can proceed to create or access your account on the DREAM™ platform and view all the incoming data points.

Super SkyBox Data on DREAM™

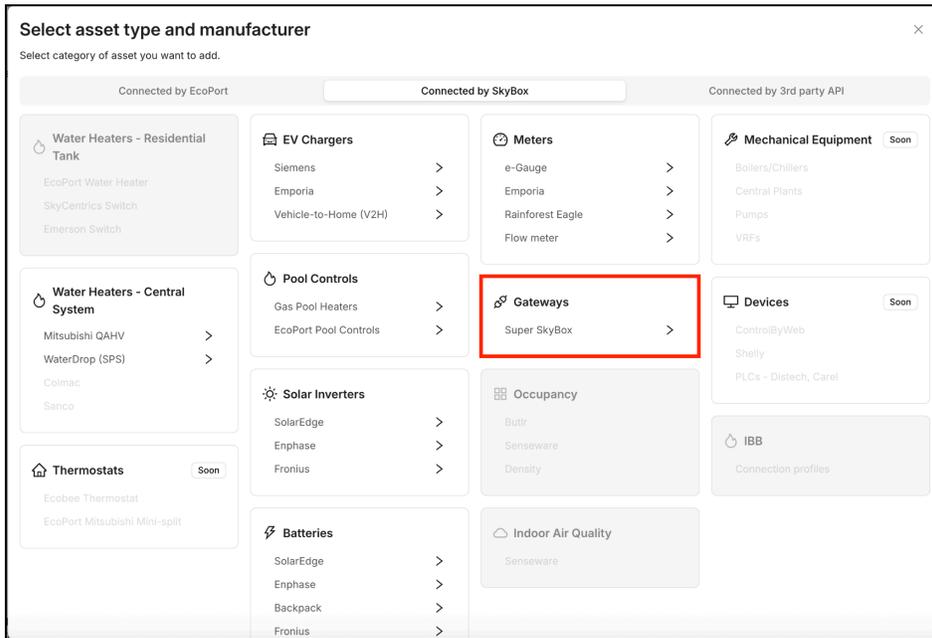
1. Go to <https://dream.skycentrics.com/login> and login with your DREAM™ account credentials. If you don't have one, you can sign up instead.



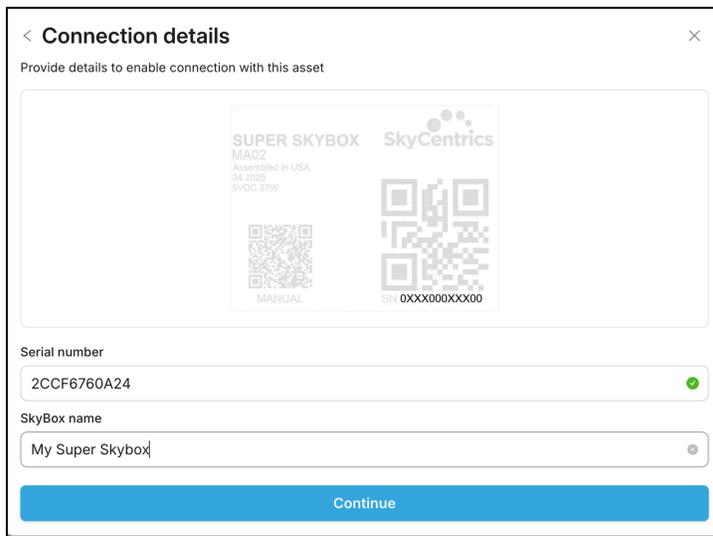
2. Select the organization and continue to the dashboard. Once here, click on **add asset** in the top right corner:



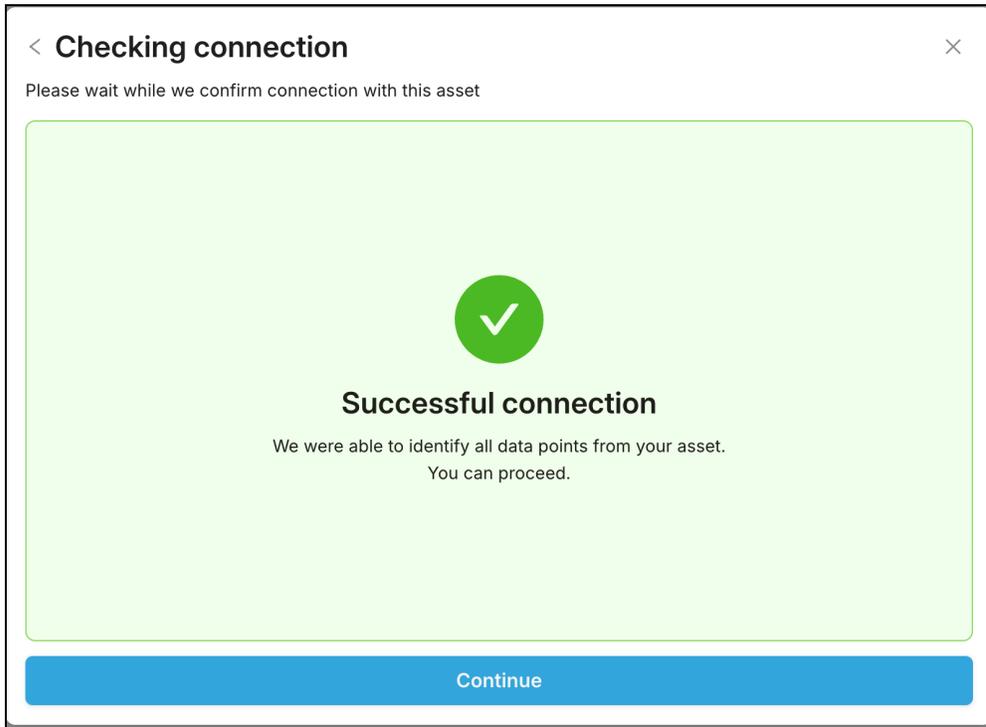
3. Select Super Skybox under Gateways.



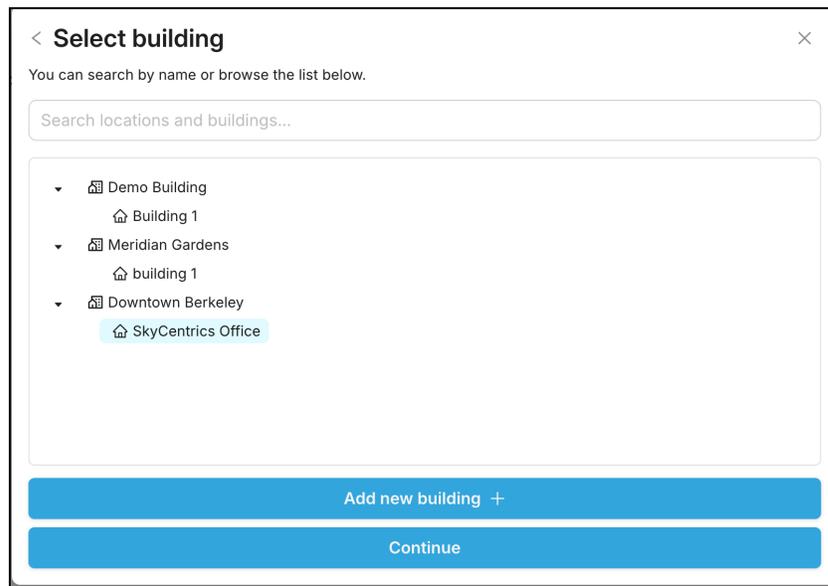
4. Enter the serial number found on the super skybox under the QR code, marked "SN" (example highlighted)



5. If the Super Skybox is online, the next page should appear as follows. Click on continue



6. Select from an existing building or create a new building



< Building details ×

Provide details of the building you want to add.

*** Location**

Downtown Berkeley
▼ ✓

Building name

e.g. Tower A - Office Complex

*** Number of floors**

1
✓

*** Address**

e.g. 314 2nd Street

*** City**

e.g. San Francisco

*** State**

Select state
▼

*** ZIP code**

e.g. 90210

Continue

7. Once added, the asset will appear under the location and/or building assigned:

SkyCentrics
Locations > Downtown Berkeley
Asset + Building +

Location Details

Number of buildings	Number of assets
1	1

🏠 SkyCentrics Office
1 asset(s)
>

🔍 Search assets
Serial number
+ Type
+ Last heartbeat
+ Power (W)

"Downtown Berkeley" assets

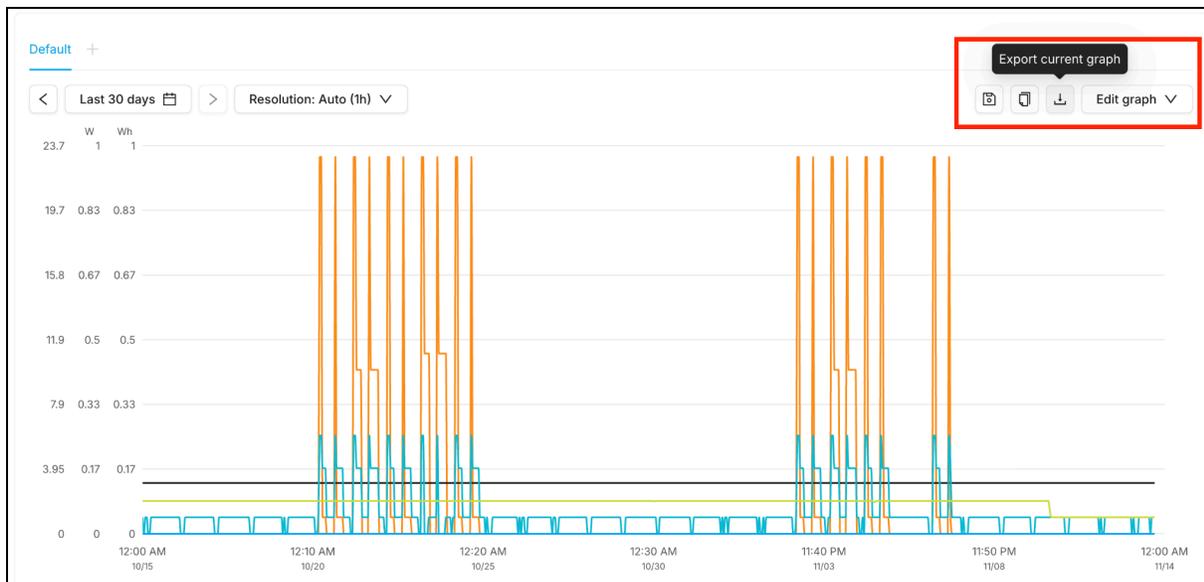
Name	Type	Manuf.	Building	Model	Power (W)	Last heartbeat
Super Skybox Office UI Test	Gateway	SkyCentrics	SkyCentrics Offi...	-	-	11/12/25, 2:26 PM

< 1 >
10 / page

- 8. Once your device has been added, the “Data” tab will show the last recorded value for each data point, and the “Graphs” tab customize visual representation of your data points:



- 9. Data can be exported from the “Graphs” tab using the option highlighted below. This will create a .csv file with the data fields and time range selected and displayed:



End of Manual