

How to connect GoodWe SEC3000C with Reduxi controller

Connect the GoodWe SEC3000C to the Reduxi Controller via Modbus TCP/IP.

🔧 GoodWe SEC3000C · Reduxi Controller

🌐 Modbus TCP/IP (Ethernet) 📡 Port 502

GOODWE



GoodWe SEC3000C

Text description of this image

IN THIS ARTICLE

1. Technical documentation
2. Required equipment
3. Connect the SEC3000C to the network
4. Configure the SEC3000C
 - Direct Ethernet access
 - Access via router
 - Access via Wi-Fi hotspot
 - Static IP address
 - Modbus TCP channel
5. Log in to the Reduxi web interface
 - Via the Reduxi app
 - Via a web browser
6. Add the SEC3000C to Reduxi
 - Basic settings
 - Communication settings
 - Test communication
7. Check the readings
 - Last measurements
 - Enable control
8. Summary
9. Common issues
10. Related articles

1 Technical documentation

The GoodWe SEC3000C is a smart energy controller. According to GoodWe it supports up to 10 inverters via LAN and up to 60 inverters via RS485. It has protection class IP66 and works from -30 to +60 °C.

- [GW_SEC3000C_User-Manual-EN.pdf](#) – Official GoodWe user manual
- [GoodWe SEC3000C product page](#) – Specifications and downloads

2 Required equipment

You need the following:

- ☐ GoodWe SEC3000C, powered on
- ☐ Reduxi Controller
- ☐ Ethernet (RJ45) cables
- ☐ Router or switch
- ☐ Computer with Chrome 68 or newer, or Firefox 78 or newer, for the web interface of the SEC3000C
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

3 Connect the SEC3000C to the network

3.1 Physical connection

The SEC3000C supports two network connection methods:

- **LAN (Ethernet):** recommended for Modbus TCP
- **Wi-Fi:** less reliable for industrial communication

1 Connect the cable

Connect the SEC3000C to your local network (router or switch) with an Ethernet (RJ45) cable.

2 Power on

Make sure the device is powered on.

3 Check the LED

The LAN port LED must be green or yellow.

4 Configure the SEC3000C

The SEC3000C has an integrated web interface for all device parameters. You can open it from a computer via Ethernet or Wi-Fi. Use one of the three access methods below.

4.1 Access via direct Ethernet connection (default IP)

This is the most reliable method for the first configuration.

1

Connect the computer

Connect your computer directly to any switch port on the SEC3000C with an Ethernet cable.

2

Set the IP address of the computer

The device and the computer are not yet in the same network. Set the IP address manually: **Network Settings – Change adapter options**, right-click the adapter, **Properties**, edit IPv4 settings.

PARAMETER	VALUE
Computer IP address	172.18.0.22
Subnet mask	255.255.255.0
Default gateway	172.18.0.1

Factory IP address of the device: 172.18.0.12

3

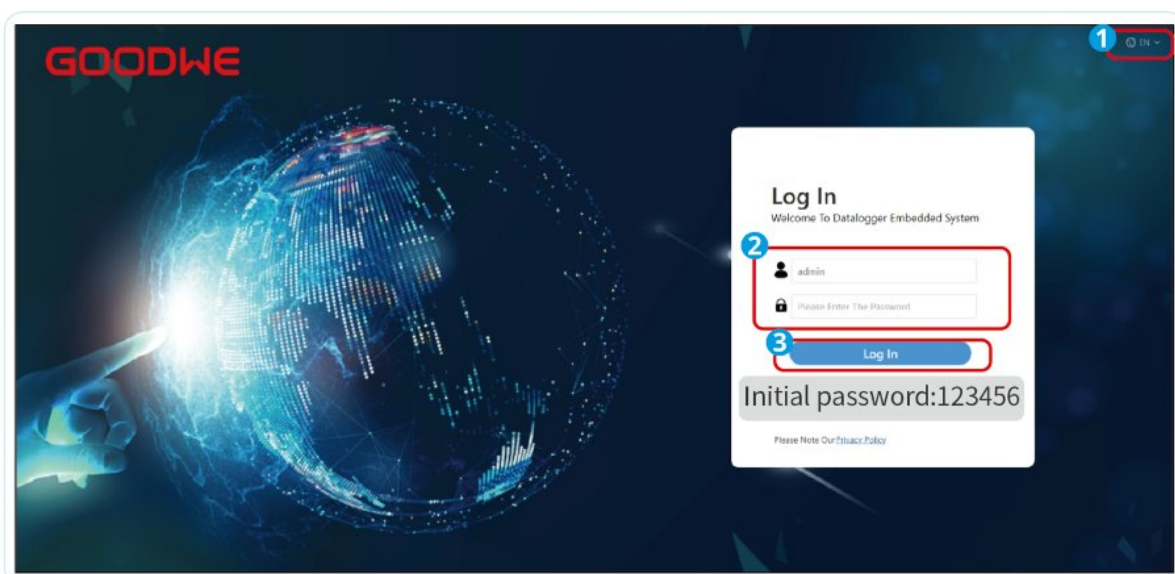
Open the web interface

Open a web browser and enter <https://172.18.0.12:443>

4

Log in

Default credentials: user **admin**, password **123456**.



Login page of the SEC3000C

Text description of this image



Change the password

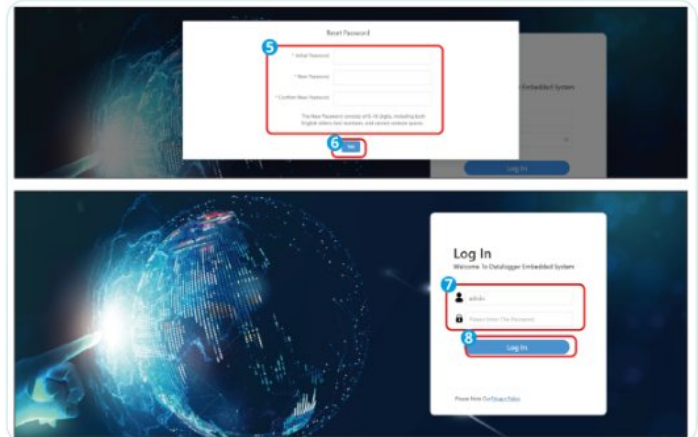
After the first login, change the password immediately. A lost password cannot be recovered without a factory reset.



1. Prompt after first login

Text description of this image

Screenshot of the GoodWe Datalogger Embedded System web interface after the first login, low resolution. In the background the dark blue login page with a globe image and a grey Log In panel (Welcome To Datalogger Embedded System). In front, a white alert dialog with a short title and the text: To ensure the security of your account, you must immediately



2. Set a new password

2. Text description of this image

4.2 Access via router (dynamic IP / DHCP)

Use this method when the device is already connected to a local network.

- 1 Connect both devices**
Connect the SEC3000C and your computer to the same router with Ethernet cables.
- 2 Find the device**
Open the admin interface of the router and look up the list of connected devices (DHCP client list).
- 3 Read the IP address**
Find the IP address assigned to the SEC3000C.
- 4 Open the web interface**
Enter this IP address in your browser, for example `https://192.168.1.50`.
- 5 Log in**
User `admin`, password `123456` (or your new password).

4.3 Access via device Wi-Fi hotspot

The SEC3000C has a built-in Wi-Fi hotspot for configuration.

1 Connect to the hotspot

Connect your computer or phone to the Wi-Fi network **Log-*****. The ******* stands for the serial number of the device. Default password: **12345678**.

2 Open the web interface

Open a web browser and enter **https://172.18.0.12:443**

3 Log in

User **admin**, password **123456** (or your new password).



Initial setup only

Use Wi-Fi access only for the initial setup. For stable communication with the EMS, always use an Ethernet connection.

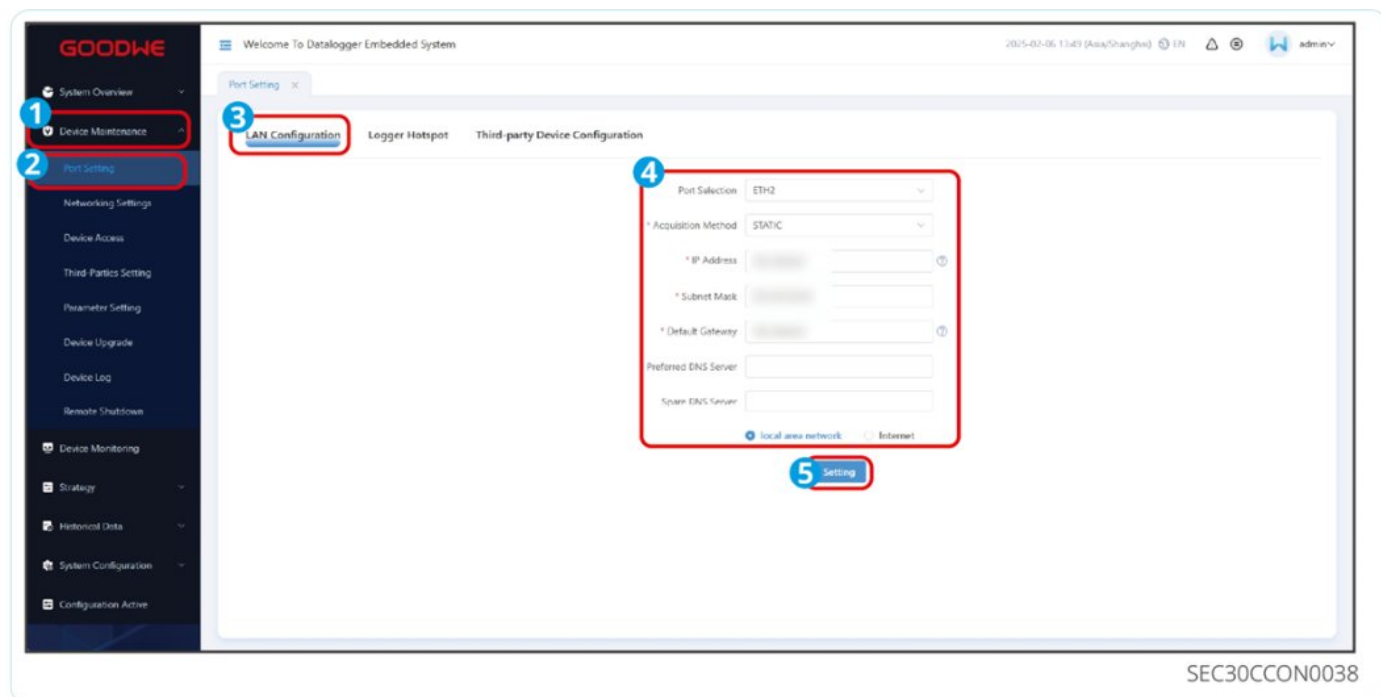
4.4 Set a static IP address

Modbus TCP/IP communication needs a **static IP address**. With DHCP the router may assign a different IP after each reboot and communication fails. Make sure the Ethernet cable is connected before you change the network settings.

Device ports:

- ETH1: default mode DHCP
- ETH2: default mode STATIC

The internal switch is connected to ETH2 by default. Use ETH2.



LAN configuration

Text description of this image

After login, go to **Device Maintenance – Port Settings – LAN Configuration**. Select port **ETH2** and set the IP mode to **STATIC**. Configure these parameters:

PARAMETER	VALUE
IP Address	A fixed IP in the same subnet as the EMS, for example 192.168.1.50
Subnet Mask	For example 255.255.255.0
Default Gateway	Router IP, for example 192.168.1.1
Primary DNS Server	Usually the router IP. Required only if cloud communication is used.
LAN / Internet	Select LAN

This setting makes the device communicate with local systems (EMS, SCADA), not with the GoodWe cloud.

Click **Apply Configuration**. Then reconnect with the new IP address, for example **https://192.168.1.50:443**.

4.5 Configure the Modbus TCP channel

Modbus TCP connects the SEC3000C with external systems such as an EMS, SCADA, Home Assistant or Node-RED. The SEC3000C is the Modbus TCP slave (server). The EMS is the Modbus TCP master (client).

Go to **Device Maintenance – Forwarding Settings – Modbus-TCP** and click **Add Channel**.

The image consists of three screenshots from the GoodWe Datalogger Embedded System interface, illustrating the steps to add a Modbus-TCP channel. The interface has a dark sidebar on the left with various menu items and a main content area on the right.

- Step 1:** The sidebar menu is shown with 'Device Maintenance' highlighted. A red box and the number '1' are placed over this menu item.
- Step 2:** The 'Device Maintenance' menu is expanded, and 'Third-Parties Setting' is highlighted. A red box and the number '2' are placed over this option.
- Step 3:** The 'Modbus-TCP' tab is selected in the 'Third-Parties Setting' section. A red box and the number '3' are placed over the 'Modbus-TCP' tab.
- Step 4:** The 'Add Channel' button is highlighted in the top right corner of the 'Modbus-TCP' section. A red box and the number '4' are placed over this button.
- Step 5:** The 'New Channel' dialog box is shown. It contains fields for 'Channel Name', 'Local IP', 'Local Port', 'Master IP', 'Master Port', and 'Point Table Selection'. A red box and the number '5' are placed over the 'Channel Name' field.
- Step 6:** The 'Confirm' button in the 'New Channel' dialog box is highlighted. A red box and the number '6' are placed over this button.
- Step 7:** The 'Modbus-TCP' section is shown with a table containing one channel. The 'Setting' button in the 'Operate' column is highlighted. A red box and the number '7' are placed over this button.

SEC30CCON0042

Add a Modbus TCP channel

Text description of this image

Configure the channel:

PARAMETER	VALUE
Channel Name	For example <code>EMS_Modbus</code>
Local IP	The device IP configured earlier, for example <code>192.168.1.50</code>
Local Port	<code>502</code> (default Modbus TCP port)
Master Station IP	IP address of the EMS, for example <code>192.168.1.100</code>
Master Station Port	Port used by the EMS
Point Table Selection	Import the Modbus register map required by the EMS

Click **Confirm** to save the channel, then **Apply Configuration**. After this the EMS can communicate with the device via Modbus TCP.

5 Log in to the Reduxi web interface

You can open the Reduxi web interface in two ways:



Reduxi app
Via tunnel connection · works from anywhere

REMOTE



Web browser
In the local network · via IP address or `reduxi.local`

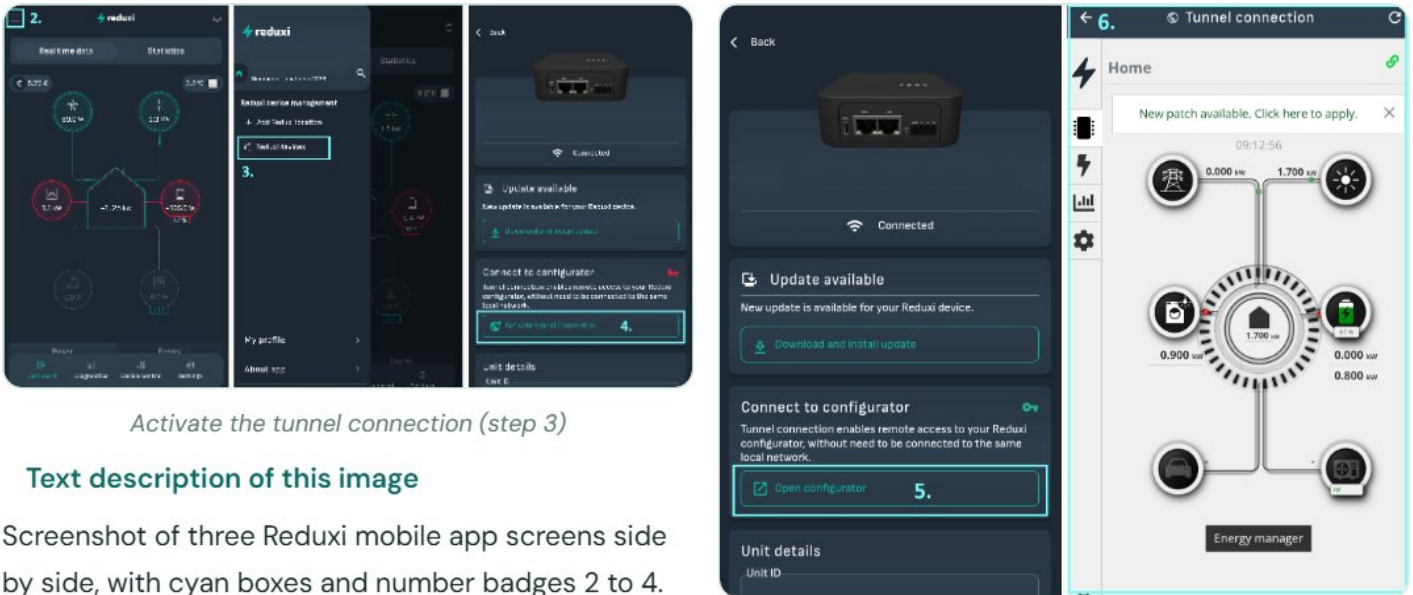
5.1 Via the Reduxi app

- 1 Open the app and log in**
Launch the Reduxi app on your smartphone or tablet and log in with your credentials.
- 2 Open Reduxi devices**
Tap the menu icon (three lines, top left) and select **Reduxi devices**.
- 3 Activate the tunnel connection**
Switch on the tunnel connection and wait a moment until it is active.

4

Open the configurator

Tap **Open configurator**. The Reduxi web interface opens.



Activate the tunnel connection (step 3)

Text description of this image

Screenshot of three Reduxi mobile app screens side by side, with cyan boxes and number badges 2 to 4. Left screen (dashboard, dark theme): menu icon at top left marked with a box and badge 2; 'reduxi' logo; tabs 'Real time data' (active) and 'Statistics'; price 5.79

Open configurator (step 4)

Text description of this image

5.2 Via a web browser

1

Open the login page

On a device in the same network, open a web browser and enter the controller's IP address or **http://reduxi.local**. You can find the controller's IP address in your router's device list or in the Reduxi app under **Reduxi devices**.

2

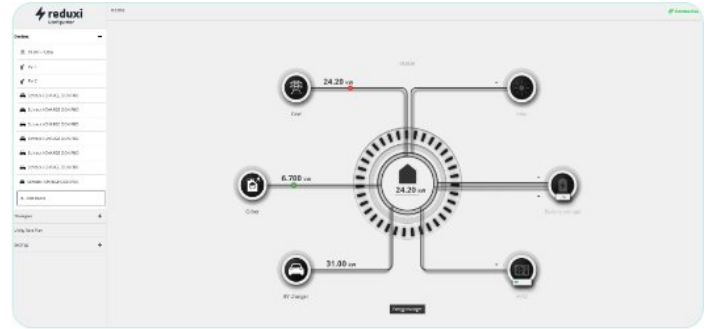
Log in

Username: **admin** · Password: **admin** (factory default)



Reduxi Controller login screen

Text description of this image



Controller web interface after login

2. Text description of this image

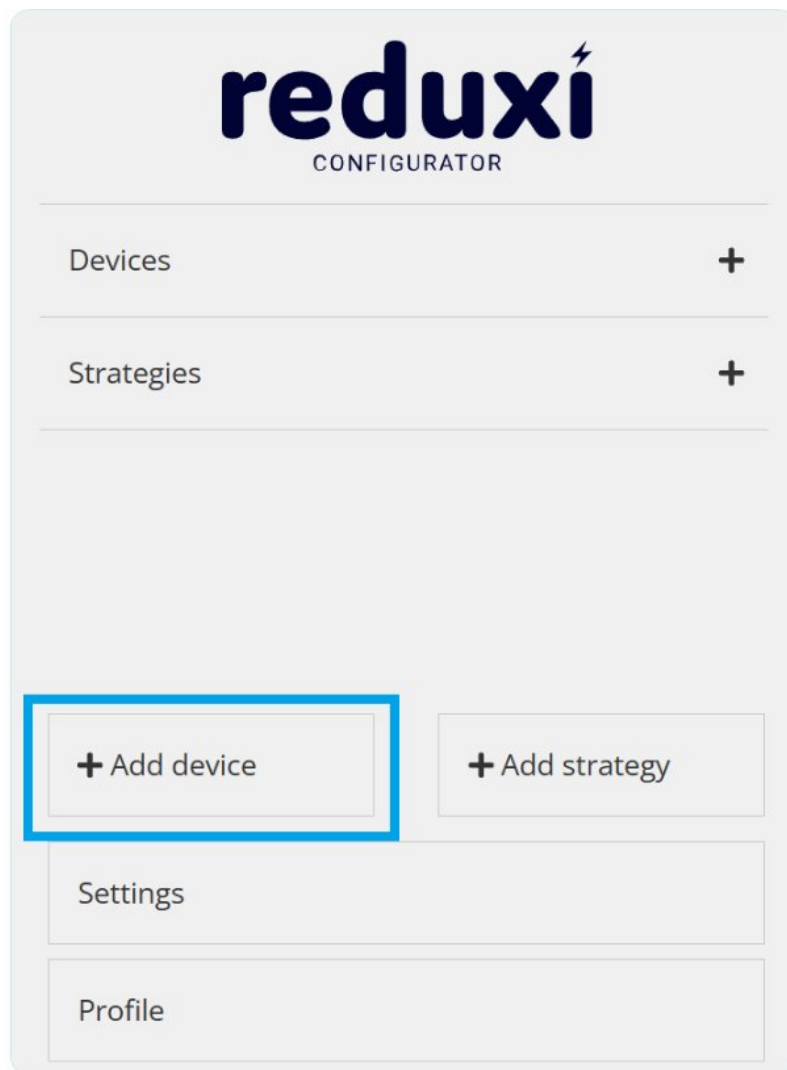
Screenshot of the Reduxi Configurator web interface

6 Add the SEC3000C to Reduxi

Use these steps to add a new GoodWe SEC3000C or to edit an existing one.

6.1 Basic settings

Log in to the [Reduxi Configurator](#) (see [Point 5](#)) and click **+ Add device**.



The Add device button

Text description of this image

In the first step, select the basic parameters of the device:

- Device type: Hybrid inverter or Battery
- Type: GoodWe SEC3000C
- Name: a name of your choice

1

2

3

Basic settingsCommunication channelAdvanced settings

Basic settings

Device type *

Type *

Name *

Back

Next

Basic settings: device type, type and name

Text description of this image

Click **Next**.

6.2 Communication settings

Enter the communication parameters of the GoodWe SEC3000C:

PARAMETER	VALUE
Connection	TCP/IP
IP	The IP address of the GoodWe SEC3000C
Port	Always 502
Modbus unit ID	The Logic address from the Modbus settings of the GoodWe SEC3000C

1 Basic settings 2 Communication channel 3 Advanced settings

Communication channel and device configuration

Connection *
TCP/IP

IP *

Port *
502

Modbus unit ID *
1

Read optimizers
☒ No

Measurements from optimizers are only available on MQTT and other connectors. When readout from optimizers is enabled, battery and solar regulation is only possible in 30-60 seconds interval.

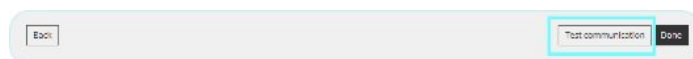
Back Test communication Next

Communication settings

Text description of this image

6.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the GoodWe SEC3000C once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.



The **Test communication** button

Text description of this image

Screenshot of the bottom button bar of a Reduxi Configurator page. Left: button 'Back'. Right: button 'Test communication' (marked with a cyan box) and dark button 'Done'.

The **Done** button

2. Text description of this image

7 Check the readings

7.1 Last measurements

After communication is established, check the values under **Devices – GoodWe SEC3000C** in the Reduxi Configurator.

7.2 Enable control by Reduxi

To control the device with Reduxi, set the control type under **Devices – GoodWe SEC3000C** to **AUTO**. Then define a strategy as described in [Strategies for Reduxi controller](#).

Summary

Preparation (Points 1–3): Read the GoodWe manual. Prepare cables, router and computer. Connect the SEC3000C to the network by Ethernet.

GoodWe SEC3000C (Point 4): Open the web interface, change the default password, set a static IP on ETH2 and add the Modbus TCP channel with local port 502.

Add to Reduxi (Points 5–6): Log in to the Reduxi web interface, click + Add device, enter IP, port 502 and the Logic address as Modbus unit ID. Click Test communication, then Done.

Go live (Point 7): Check the last measurements. Set the control type to AUTO and define a strategy.

→ Common issues

ISSUE	SOLUTION
No access to 172.18.0.12	Set the IP address of the computer manually to 172.18.0.22 with subnet mask 255.255.255.0 (Point 4.1). Use https and port 443.
Communication stops after a reboot	The device probably uses DHCP and got a new IP. Set a static IP on ETH2 (Point 4.4).
Password lost	The password cannot be recovered without a factory reset. Change the default password after the first login and store it.
Open configurator does not open or stays empty	The tunnel is not active yet. Wait about 30 seconds and check that the controller is online.
Login with <code>admin</code> is rejected	The password was changed during installation. Ask the installer. The Reduxi account password does not work here.
<code>reduxi.local</code> does not load	Your device is not in the same network as the controller. Use the IP address or the tunnel connection.
Communication test fails, device shows offline	Check reachability, IP address / port / unit ID, and that the protocol is enabled on the device.

→ Related articles

Matching guides from the Reduxi knowledge base:



GoodWe SEC3000C

Product page with specifications and downloads.



Device setup guides

All step-by-step guides for connecting devices to the Reduxi Controller



Strategies for the Reduxi Controller

Energy manager and other strategies explained