

How to connect SAJ CM2 BESS with Reduxi controller

Integrate the SAJ CM2 BESS with the Reduxi Controller through Modbus TCP. This gives you maximum flexibility and lower cost and energy use.

🔧 SAJ CM2 BESS · Reduxi Controller

🌐 Modbus TCP/IP (Ethernet)

🔌 Port 502 (opens automatically)



SAJ CM2 Smart C&I All-in-One BESS

Text description of this image

IN THIS ARTICLE

1. Preparation

- Technical documentation
- Required equipment

2. Connect the SAJ CM2 to the Reduxi Controller

- Requirements
- Network connection

3. Log in to the Reduxi web interface

- Via the Reduxi app
- Via a web browser

4. Add the SAJ CM2 to Reduxi

- Basic settings
- Communication settings
- Test communication

5. Check the readings

6. Summary

7. Common issues

8. Related articles

1 Preparation

1.1 Technical documentation

- [CM2 Quick Installation Guide](#) – Quick installation guide for the SAJ CM2
- [CM2 Full Installation Manual](#) – Full user manual of the SAJ CM2
- [SAJ CM2 series product page](#) – Product page of the Smart C&I All-in-One BESS

1.2 Required equipment

- ☐ Reduxi Controller
- ☐ SAJ CM2 battery system (CM2-EMS BESS)
- ☐ Ethernet cable and a local router
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

2 Connect the SAJ CM2 to the Reduxi Controller

2.1 Requirements

For the CM2-EMS BESS to communicate with the Reduxi Controller, you need two things:

- **Modbus TCP/IP** must be open.
- The **IP address** of the SAJ CM2 battery system.

2.2 Connect the SAJ CM2 to the local network

The SAJ CM2 and the Reduxi Controller must be **on the same network**.

- Connect the CM2 BESS to the local router through **Ethernet**. For detailed instructions, see the [CM2 manual](#).
- The Modbus **port 502** on the CM2 opens automatically when you connect it through Ethernet.



Physical connection of the SAJ CM2 and the Reduxi Controller

Text description of this image

3 Log in to the Reduxi web interface

You can open the Reduxi web interface in two ways:



REMOTE

Reduxi app

Via tunnel connection · works from anywhere



Web browser

In the local network · via IP address or redux.local

3.1 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

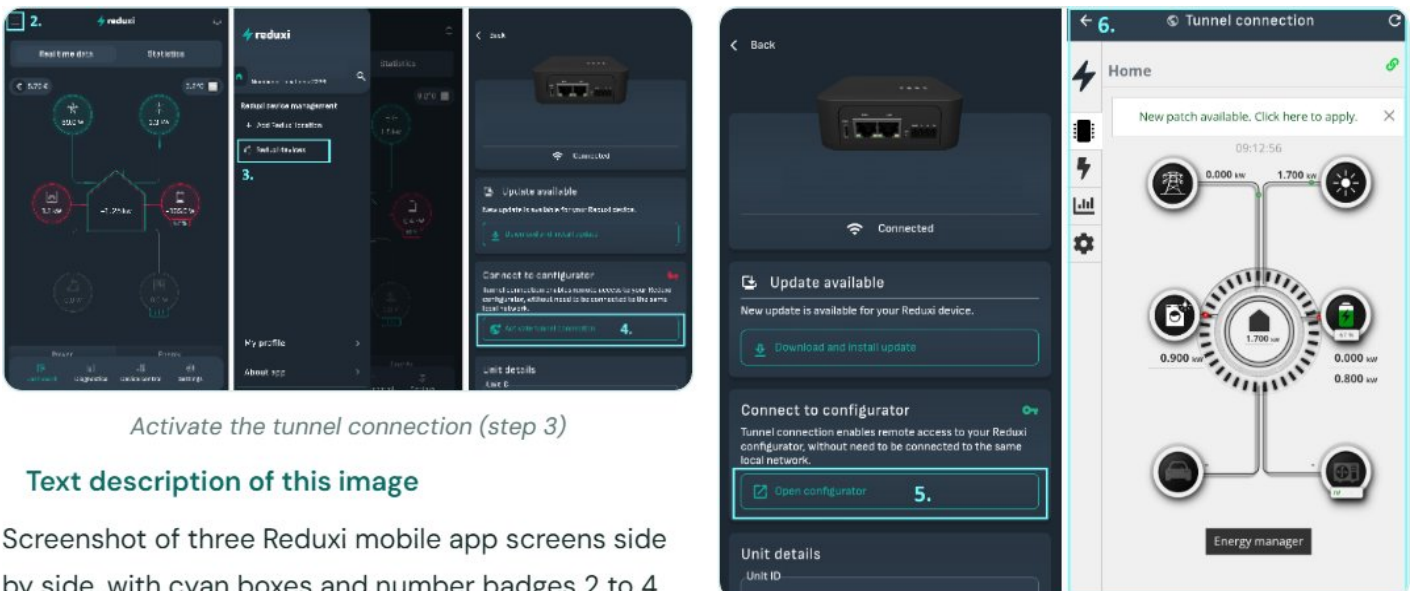
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

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)

2. Text description of this image

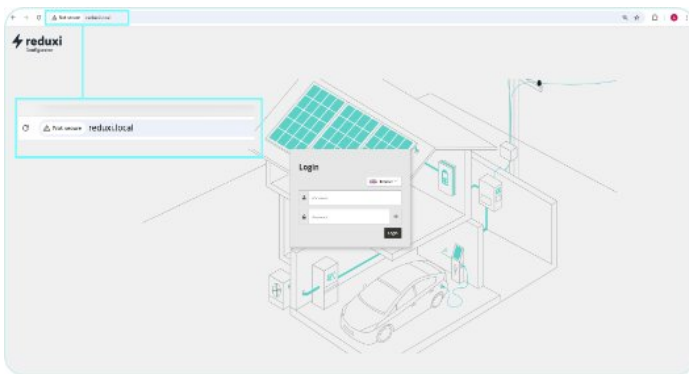
3.2 Via a web browser

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**.

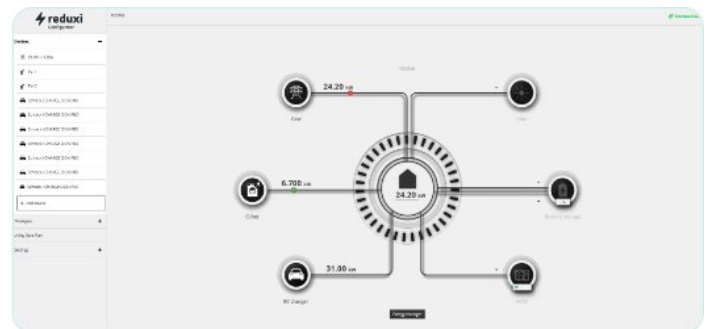
2 Log in

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

4 Add the SAJ CM2 to Reduxi

Use these steps to add a new SAJ CM2 or to edit an existing one.

4.1 Basic settings

Log in locally to the [Reduxi Configurator](#) on the controller (see [Point 3](#)) and click **+ Add device**.

reduxi[⚡]

CONFIGURATOR

Devices



Strategies



+ Add device

+ Add strategy

Settings

Profile

The Add device button

Text description of this image

In the first step (basic settings), select the basic parameters of the device:

- Device type: **Hybrid Inverter**
- Type: **SAJ CM2**
- Name: a name according to the model

1 Basic settings 2 Communication channel

Basic settings

Device type *

Hybrid inverter

Type *

Saj CM2

Name *

Saj CM2

Back Next

Basic settings: device type, type and name

Text description of this image

4.2 Communication settings

Enter the **Modbus ID** and the **IP address** that you obtained from the SAJ CM2 system.

1

Basic settings

2

Communication channel

Communication channel and device configuration

Connection *

TCP/IP

IP *

Port *

502

Modbus unit ID *

1

Back

Test communication

Done

Communication settings: Modbus ID and IP address

Text description of this image

4.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the SAJ CM2 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

If the test fails, check that you entered the correct **Modbus ID** and **IP address**. If the problem remains, contact the Reduxi Support Team.

5 Check the readings

5.1 Last measurements

After communication is established, check the values under **Devices – SAJ CM2** in the **Reduxi Configurator** as an additional test.

Control type		
Auto Manual		
02.10.2025 16:10:53		
Battery		
Active power	-0.7 kW	02.10.2025 16:11:18
Current	-2.10 A	02.10.2025 16:11:18
Voltage	316.90 V	02.10.2025 16:11:18
Capacity	7.3 kWh	02.10.2025 16:11:18
Max. capacity	10.1 kWh	02.10.2025 16:11:18
State	DISCHARGING	02.10.2025 16:11:18
State of charge	72.00 %	02.10.2025 16:11:18
State of health	100.00 %	02.10.2025 16:11:18
Min. state of charge	0.00 %	02.10.2025 16:11:20
Import active energy	79.3 kWh	02.10.2025 16:11:18
Export active energy	70.2 kWh	02.10.2025 16:11:18
Min. active power	-7.9 kW	02.10.2025 16:11:18
Max. active power	7.9 kW	02.10.2025 16:11:18
PV		
Active power	-0.2 kW	02.10.2025 16:11:20
Current	-0.60 A	02.10.2025 16:11:20
Voltage	339.40 V	02.10.2025 16:11:20
Export active energy	70.5 kWh	02.10.2025 16:11:20
Min. active power	-8.0 kW	02.10.2025 16:11:20
Load		
Active power	0.9 kW	02.10.2025 16:11:19
Import active energy	196.7 kWh	02.10.2025 16:11:19

Last measurements of the SAJ CM2

Text description of this image

5.2 Enable control by Reduxi

For advanced battery control, integrate the device into the Reduxi strategy. Under **Devices – SAJ CM2** in the **Reduxi Configurator**, set the **control type** to **AUTO**. Only then do strategy commands affect the battery.

To achieve maximum flexibility and energy cost reduction with dynamic prices and dynamic tariffs, define a strategy as described in **Strategies for Reduxi controller**.

After you add the device, you can also monitor and control it in **the Reduxi application**.

✓ Summary

Preparation (Points 1–2): Use the SAJ CM2 manuals. Connect the CM2 to the local router with Ethernet, on the same network as the Reduxi Controller.

SAJ CM2 (Point 2): Modbus TCP/IP must be open. Port 502 opens automatically. Note the IP address and the Modbus ID.

Add to Reduxi (Points 3–4): Log in to the Reduxi web interface. Add the device, enter the Modbus ID and the IP address, and run Test communication.

Go live (Point 5): Check the last measurements. Set the control type to AUTO and define a strategy.

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check the Modbus ID and the IP address. Check that the SAJ CM2 and the Reduxi Controller are on the same network. Check that Modbus TCP/IP is open.
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:



SAJ CM2 series

SAJ product page of the Smart C&I All-in-One BESS.



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