

Reduxi with Sigenergy Hybrid

Integrate the Sigenergy hybrid inverter with the Reduxi Controller via Modbus TCP/IP. This gives you maximum flexibility and cost and energy reductions of up to 30%.

🔧 Sigenergy hybrid inverter · Reduxi Controller

🌐 Modbus TCP/IP

📱 mySigen app: IP address of the inverter



Sigenergy SigenStor hybrid inverter (illustration)

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1 Preparation

1.1 Technical documentation

Use these documents for further information about the settings of the Sigenergy hybrid inverter.

- [Sigenergy hybrid inverter documentation](#) – Download of the inverter documentation (April Ice B2B)
- [How to enable Modbus TCP/IP](#) – Sigenergy support article
- [Sigenergy Modbus Protocol V2.7](#) – Modbus protocol of Sigenergy, release 2025-05-23
- [Video on YouTube](#) – Video linked in the original article

| 1.2 Required equipment

- ☐ Reduxi Controller
- ☐ Sigenergy hybrid inverter, connected to the Reduxi Controller
- ☐ Smartphone with the mySigen app
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

2 Configure the Sigenergy hybrid inverter

| 2.1 Download the mySigen app

Download the mySigen app:

- Google Play: [mySigen on Google Play](#)
- Apple App Store: [mySigen on the App Store](#)

| 2.2 Find the IP address of the inverter

When you have access through the mobile app, change the settings so that the Reduxi Controller can access the hybrid inverter through Modbus TCP/IP. Follow these steps.

1

Open the mySigen app

Connect to the mySigen app. The image shows the home page.

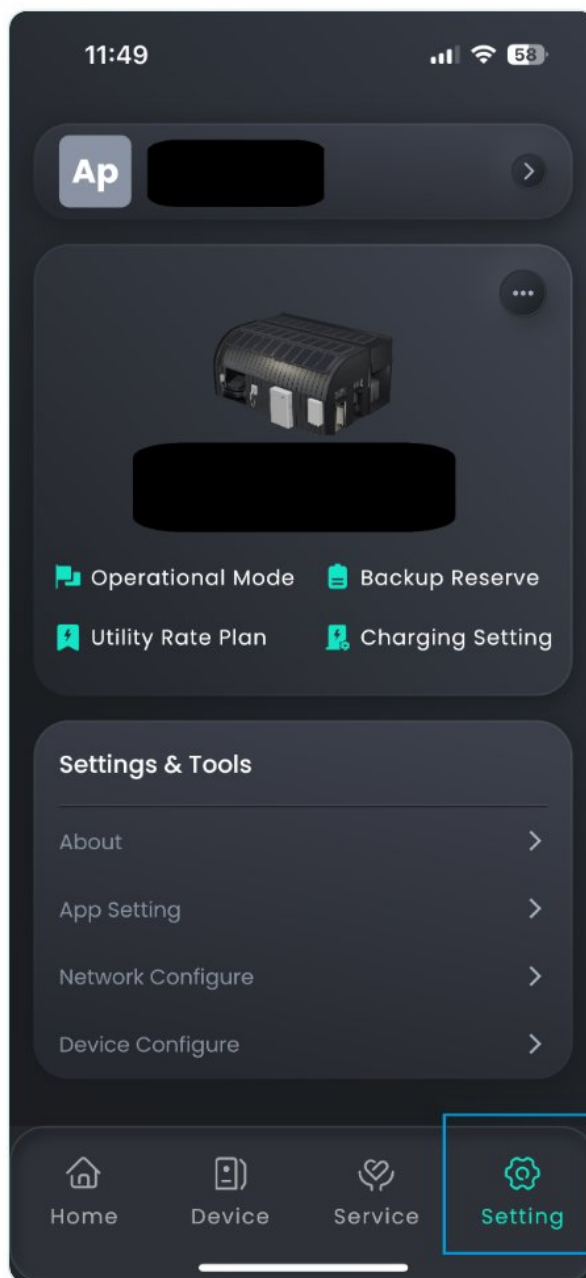


Home page of the mySigen app

2

Open the settings

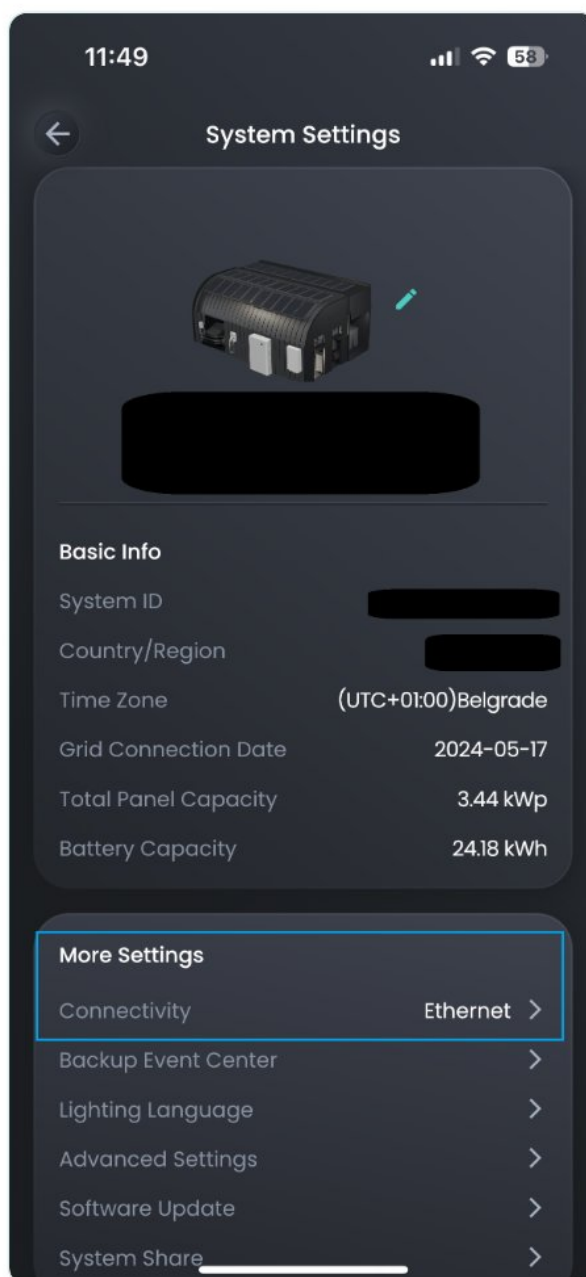
Tap the settings icon at the lower right.



Settings at the lower right

Open Connectivity

Go to the **More settings** section and tap **Connectivity**.

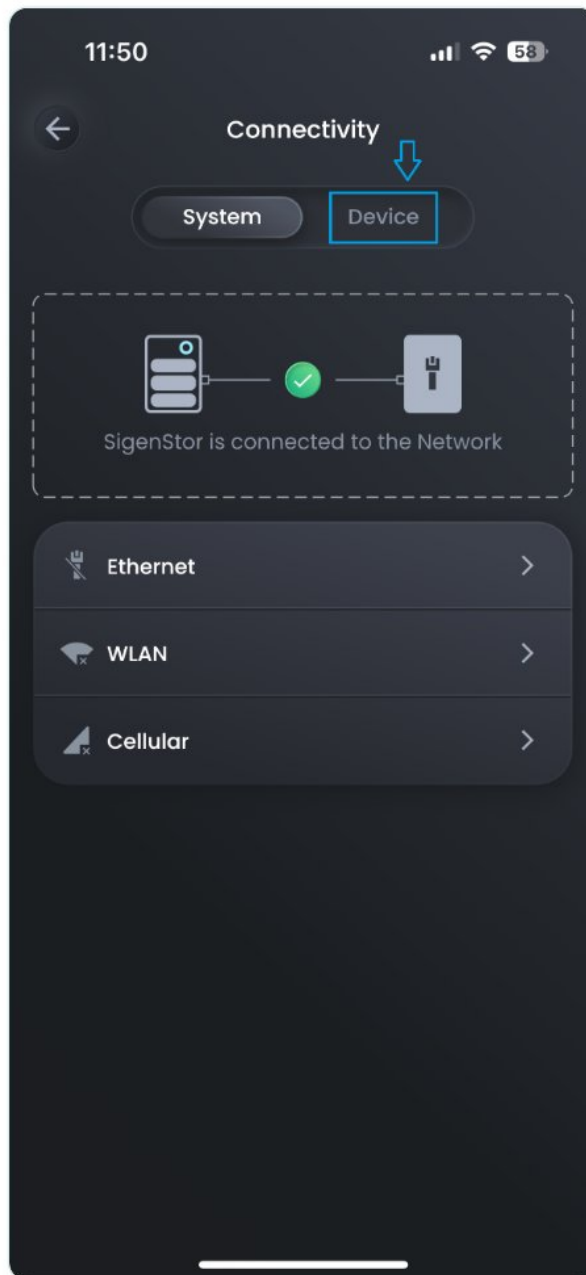


More settings – Connectivity

4

Open the device

Tap **Device**.

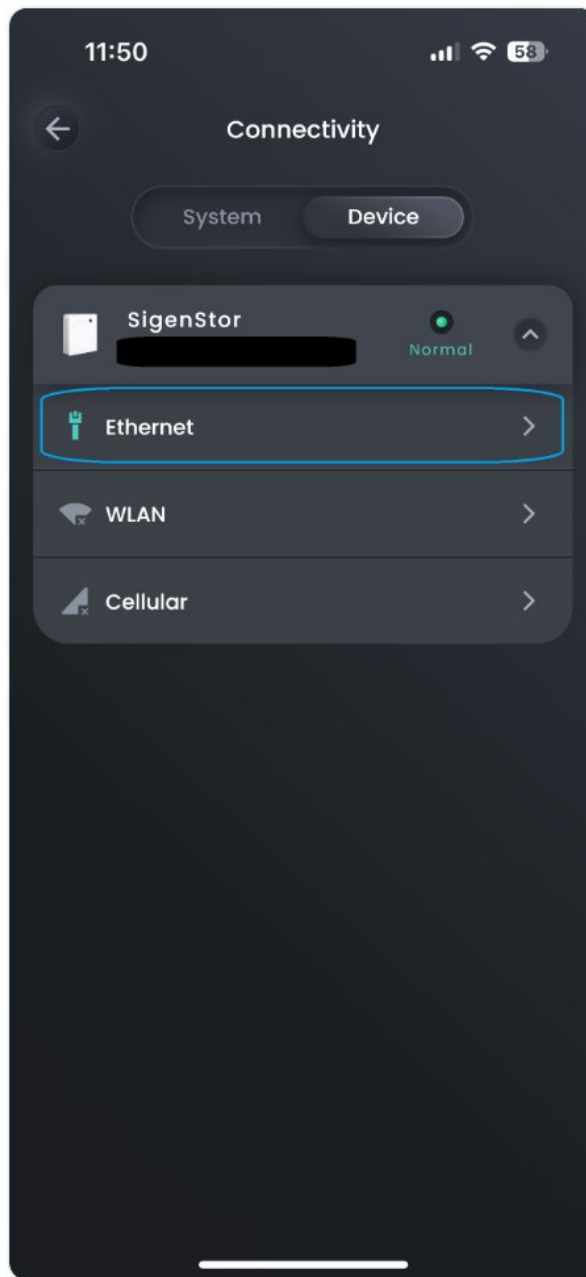


Device

5

Open Ethernet

Tap **Ethernet**.

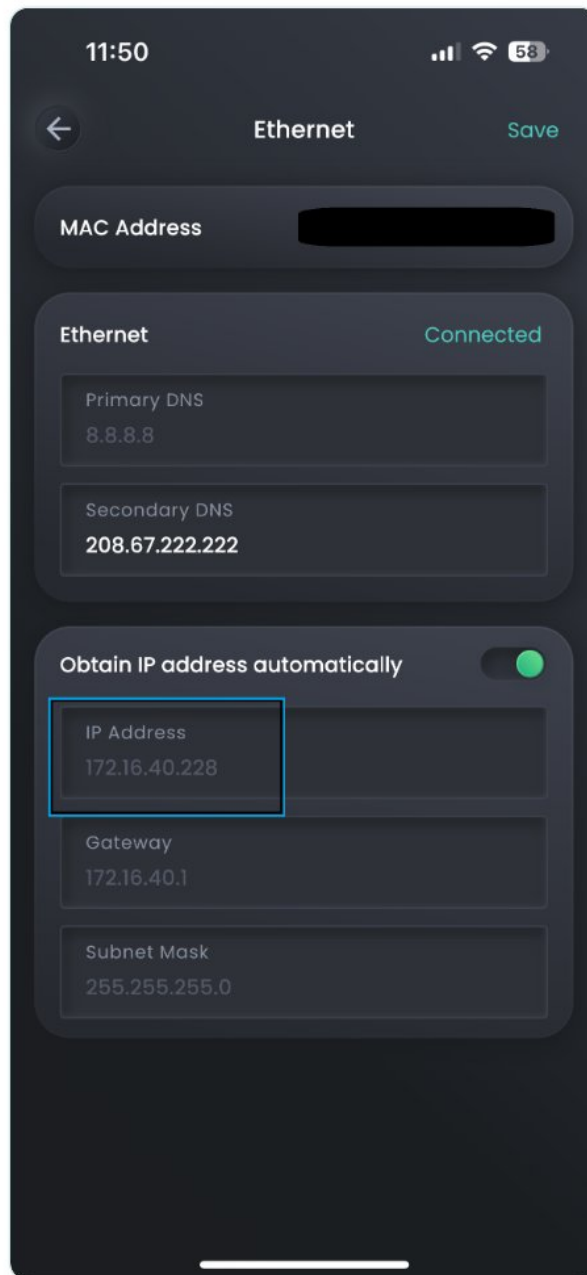


Ethernet

6

Copy the IP address

Copy the IP address of the hybrid inverter. You need it later for the communication to Reduxi.



IP address of the hybrid inverter

2.3 Enable Modbus TCP/IP

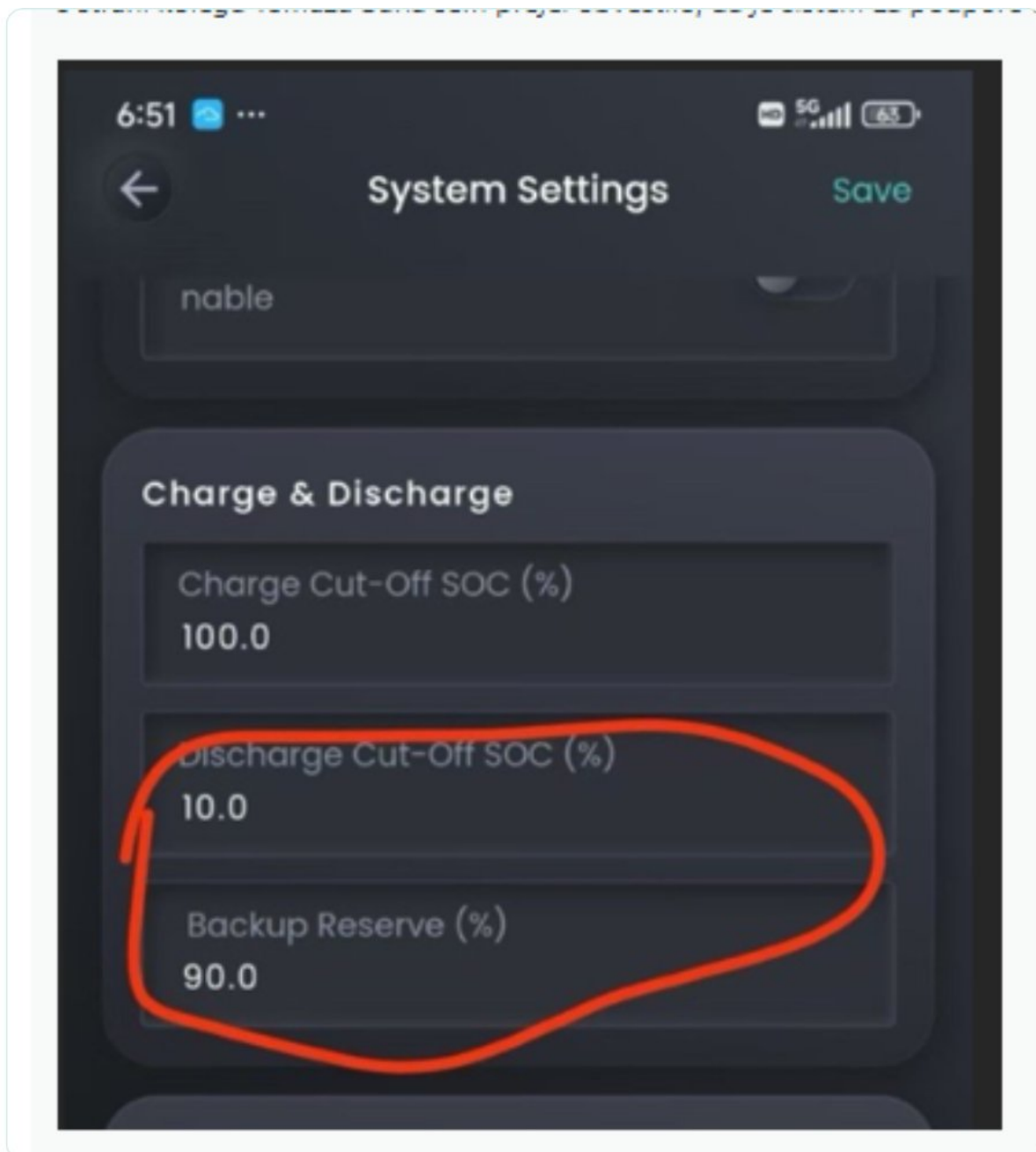
For instructions on how to enable Modbus TCP/IP on the inverter, see the [Sigenergy support article](#).

2.4 Set the discharge cut-off and the backup reserve



Important

In the settings of the Sigenergy storage, set **Discharge Cut-Off SOC (%)** and **Backup Reserve (%)** to the values shown in the image.



Required values for Discharge Cut-Off SOC (%) and Backup Reserve (%)

3 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`

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

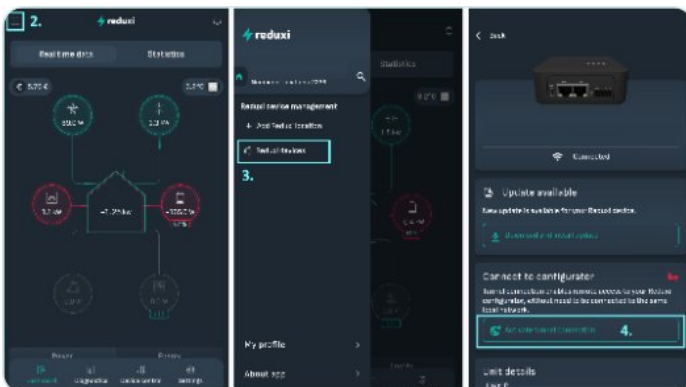
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

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)



Open configurator (step 4)

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**.

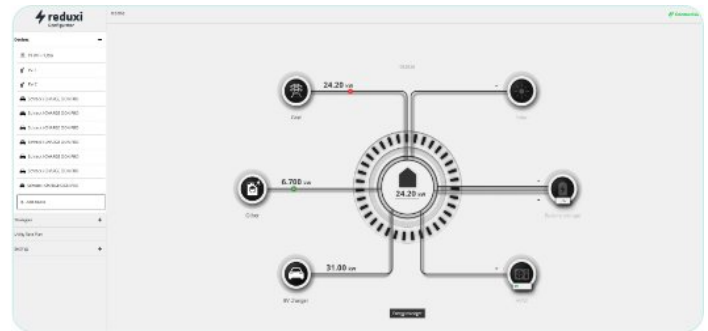
2

Log in

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



Reduxi Controller login screen



Controller web interface after login

4

Add the Sigenergy hybrid inverter to Reduxi

After you connect the Reduxi Controller and the Sigenergy hybrid inverter, register the inverter as a new device.

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*

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

- Device type: **Hybrid Inverter**
- Type: **Sigenergy Hybrid**
- Name: a name of your choice

4.2 Communication settings

The second step sets up the communication channel between the Reduxi Controller and the Sigenergy hybrid inverter. This step is essential for Modbus TCP/IP communication. The image shows the settings of the communication channel.



Note

Paste the IP address that you copied in **Point 2** (Point 2.2).

Communication settings

4.3 Test communication

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

The **Test communication** button

The **Done** button

4.4 Advanced settings

Use the advanced settings only if the location has special needs. By default, you do not need to change anything.

1Basic settings

2Communication channel

3Advanced settings

Advanced settings

Do you want to set data saving interval?

☐ No

Default: 1 min

Do you want to set reading delay?

☐ No

Default: 1000 ms

Do you want to set writing delay?

☐ No

Default: 1000 ms

Do you want to set power generation limits and capabilities?

☐ No

Do you want to set power consumption limits and capabilities?

☐ No

Do you want to limit communication with the device to read-only?

☐ No

Default: No

Do you want to invert direction for energy import and export?

☐ No

Default: No

L1 is connected to main feed	L2 is connected to main feed	L3 is connected to main feed
L1	L2	L3

Back

Done

Advanced settings

5 Check the readings

5.1 Last measurements

After communication is established, check the readings under **Devices – Sigenergy Hybrid Inverter – Last measurement** in the [Reduxi Configurator](#).

Last measurements

Analyze

Archive

Without refreshing

Control type

Auto

Manual

14.03.2023 12:49:53

PV

PV active power	-1.0 kW	14.03.2023 12:49:53
PV current	-1.98 A	14.03.2023 12:49:53
PV voltage	327.63 V	14.03.2023 12:49:53
PV export active energy	587.0 kWh	14.03.2023 12:49:53
PV min. active power	-10.0 kW	14.03.2023 12:49:53
PV export active power limit		14.03.2023 12:49:53
enumeration.PV_STATE_NAME	CONNECTED	14.03.2023 12:49:53

Load

Load active power	0.4 kW	14.03.2023 12:49:53
Load import active energy	1,109.2 kWh	14.03.2023 12:49:53

Battery

Battery active power	0.4 kW	14.03.2023 12:49:53
Battery current	1.09 A	14.03.2023 12:49:53
Battery voltage	331.60 V	14.03.2023 12:49:53
Battery state name	CHARGING	14.03.2023 12:49:53
Battery state of charge	33.80 %	14.03.2023 12:49:53
Battery min. state of charge	0.00 %	14.03.2023 12:49:53
Battery max. state of charge	100.00 %	14.03.2023 12:49:53
Battery import active energy	765.9 kWh	14.03.2023 12:49:53
Battery export active energy	740.8 kWh	14.03.2023 12:49:53
Battery min. active power	-9.1 kW	14.03.2023 12:49:53
Battery max. active power	8.2 kW	14.03.2023 12:49:53
Battery active power setpoint	1.0 kW	14.03.2023 12:49:53

Inverter

Inverter active power	-0.4 kW	14.03.2023 12:49:53
Inverter max. active power	10.0 kW	14.03.2023 12:49:53
Inverter min. active power	-10.0 kW	14.03.2023 12:49:53
State name	RUNNING	14.03.2023 12:49:53
Error	OFF	14.03.2023 12:49:53

Grid

Grid frequency	49.990 Hz	14.03.2023 12:49:53
Grid active power	0.0 kW	14.03.2023 12:49:53
Grid import active power limit		14.03.2023 12:49:53
Grid export active power limit		14.03.2023 12:49:53
enumeration.GRID_STATE_NAME	METER_ONLINE	14.03.2023 12:49:53
Grid export active energy	1,588.7 kWh	14.03.2023 12:49:53
Grid import active energy	0.0 kWh	14.03.2023 12:49:53

Other

Battery state of health	100.00 %	14.03.2023 12:49:53
Battery temperature	23.10 °C	14.03.2023 12:49:53
Model name	SigenStoreC100TP	14.03.2023 12:49:53
Communication error	OFF	14.03.2023 12:49:53
Control type	MANUAL	14.03.2023 12:49:53
Mode name setpoint	SELF_CONSUMPTION	14.03.2023 12:49:53

Last measurements of the Sigenenergy hybrid inverter

5.2 Enable control by Reduxi

For advanced control of the Sigenenergy hybrid inverter, integrate the device into the optimization modes of the Reduxi system. Under **Devices – Sigenenergy Hybrid** 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 Sigenergy documentation. Install the mySigen app.

Sigenergy inverter (Point 2): Copy the IP address in the mySigen app. Enable Modbus TCP/IP. Set Discharge Cut-Off SOC and Backup Reserve as shown.

Add to Reduxi (Points 3–4): Log in to the Reduxi web interface. Add the device with type Sigenergy Hybrid, paste 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 that the IP address from the mySigen app is entered correctly. Check that Modbus TCP/IP is enabled on the inverter.
Unexpected battery behaviour	Check that Discharge Cut-Off SOC (%) and Backup Reserve (%) are set to the values shown in Point 2.4.
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:



Sigenergy support: enable Modbus TCP/IP

Sigenergy support article on enabling Modbus TCP/IP.



Device setup guides

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



List of supported devices

All devices that work with the Reduxi Controller



Strategies for the Reduxi Controller

Energy manager and other strategies explained