

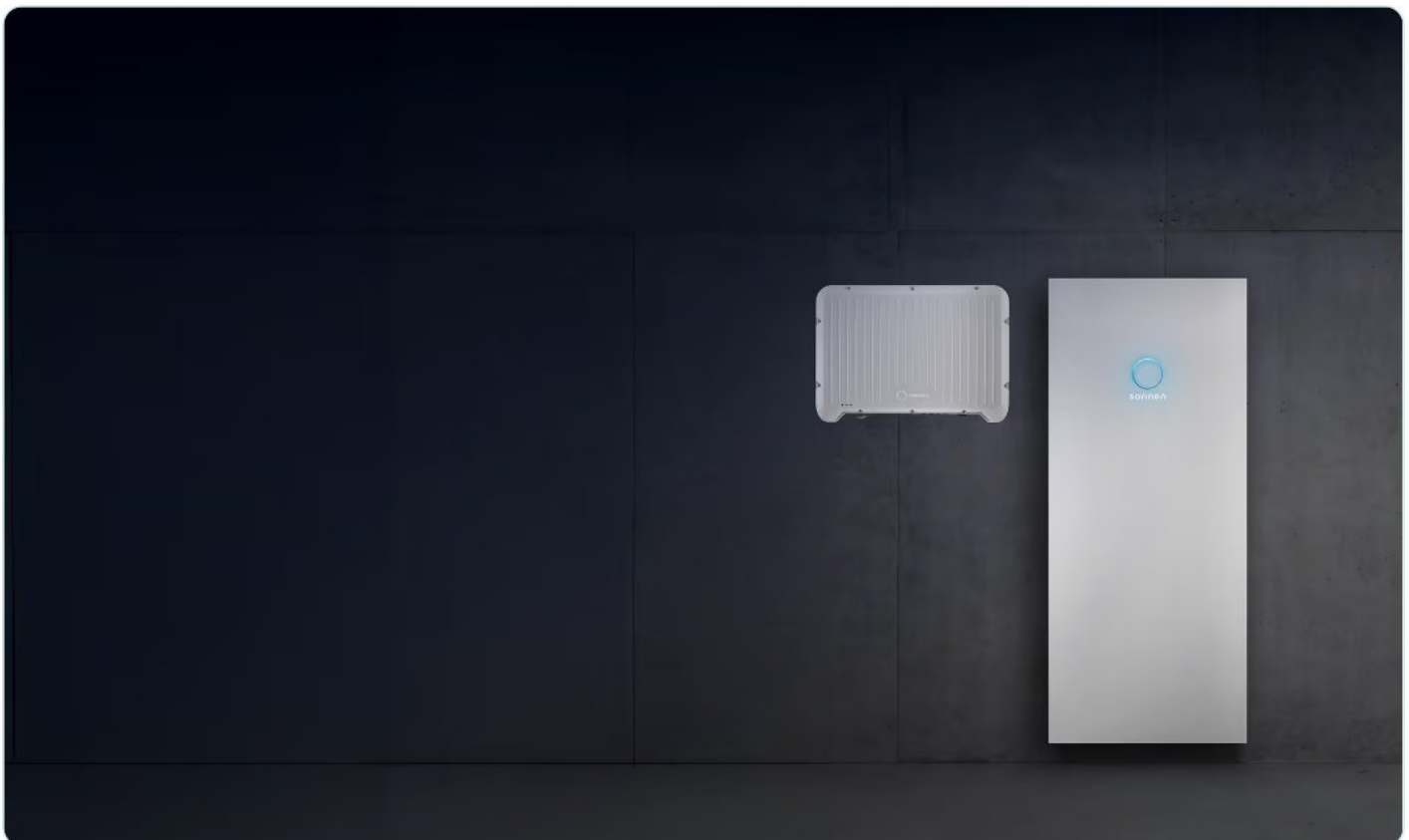
How to connect sonnenBatterie (Gen. 8 or higher, REST API connection) with Reduxi controller

Connect the sonnenBatterie Gen. 8 or higher to the Reduxi Controller via the REST API.

🔧 sonnenBatterie Gen. 8 or higher · Reduxi Controller

🌐 REST API via TCP/IP (local network)

🔑 API token: Read API and Write API enabled



sonnenBatterie 10 hybrid with inverter (manufacturer image)

Text description of this image

IN THIS ARTICLE

1. Technical documentation
2. Required equipment
3. Local access to the sonnenBatterie
4. Device configuration on the sonnenBatterie
 - Installer login
 - Dashboard
 - Enable the REST API
 - Set the operating mode
5. Log in to the Reduxi web interface
 - Via the Reduxi app
 - Via a web browser
6. Add the sonnenBatterie to Reduxi
 - Basic settings
 - Communication settings
 - Test communication
7. Check the readings and set up strategies
 - Last measurements
 - Reduxi Cloud
 - Strategies
8. Checklist
 - On the Reduxi Controller
 - On the sonnenBatterie
 - Strategy
9. Summary
10. Common issues
11. Related articles

1 Technical documentation

Manufacturer pages for the sonnenBatterie:

- [sonnenBatterie 10](#) – Product page from the manufacturer
- [Sonnen operating manuals](#) – Operating manuals from the manufacturer

Video tutorials:

2 Required equipment

Prepare the following:

- ☐ Reduxi Controller (installed and online)
- ☐ sonnenBatterie Gen. 8 or higher (REST API)
- ☐ Local IP address of the sonnenBatterie
- ☐ Installer password of the sonnenBatterie (see [Point 4](#))
- ☐ Computer in the same local network as the sonnenBatterie
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

3 Local access to the sonnenBatterie

Before you start, make sure you have the local IP address of the sonnenBatterie and that your computer is connected to the same local network.

The sonnenBatterie receives its IP address from:

- the router,
- a network switch,
- or a local DHCP server.

To find the IP address or DNS name of the sonnenBatterie, use find-my-sonnen-batterie.com and follow the [Sonnen instruction](#).

Open a web browser and enter the local IP address of the sonnenBatterie to open its web interface.

Example: `http://<IP>`



Other sonnenBatterie models

If the Software-Integration page of your sonnenBatterie offers the **JSON API** instead of the REST API, follow [How to connect sonnenBatterie with Reduxi controller](#).

4 Device configuration on the sonnenBatterie

4.1 Installer login

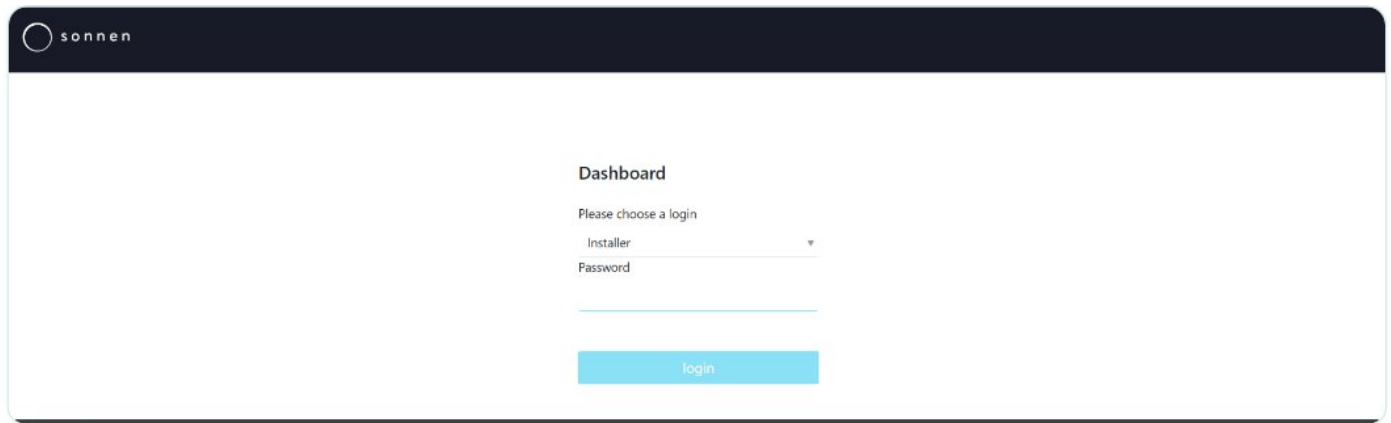
After you open the IP address in the browser, a login screen appears. Select **Installer** as the login type and enter the installer password.



Installer password

The installer password is not available to end users. It is provided only to authorized Sonnen installers or Sonnen support.

If you need access, contact the installer who commissioned the system, or contact Sonnen support. Sonnen support can verify the request, unlock access or make the required changes on your behalf.



Login screen of the sonnenBatterie

Text description of this image

4.2 Dashboard

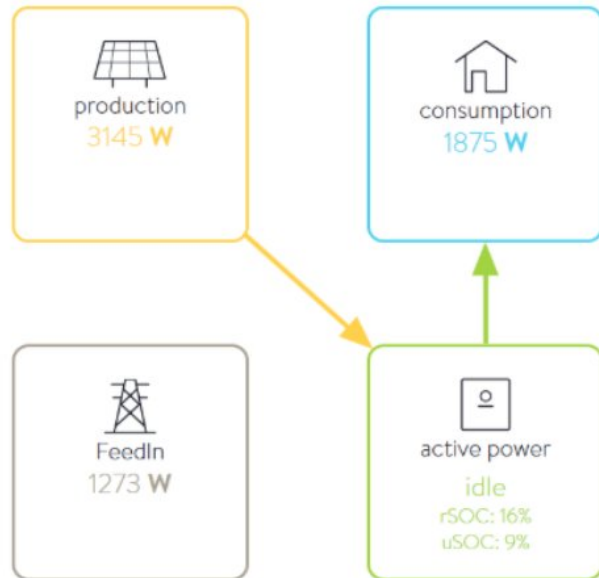
After a successful login, the **Menu / Dashboard** is displayed.

Menu

Dashboard

- System
- Settings
- Battery
- Inverter
- Powermeter
- Powermeter Setup
- IOs
- Software-Installer
- Commissioning Assistant
- System-Status
- Network
- Software-Integration

Dashboard



Menu and dashboard

Text description of this image

4.3 Enable the sonnenBatterie REST API

On the dashboard, do the following:

- 1 **Open Software Integration**
Navigate to **Software Integration**.

- 2 **Enable the APIs**
Enable **Read API** and **Write API**.

3

Get the API token

At the bottom of the page, copy the existing **API token**. If no token is available, click **Create new**.



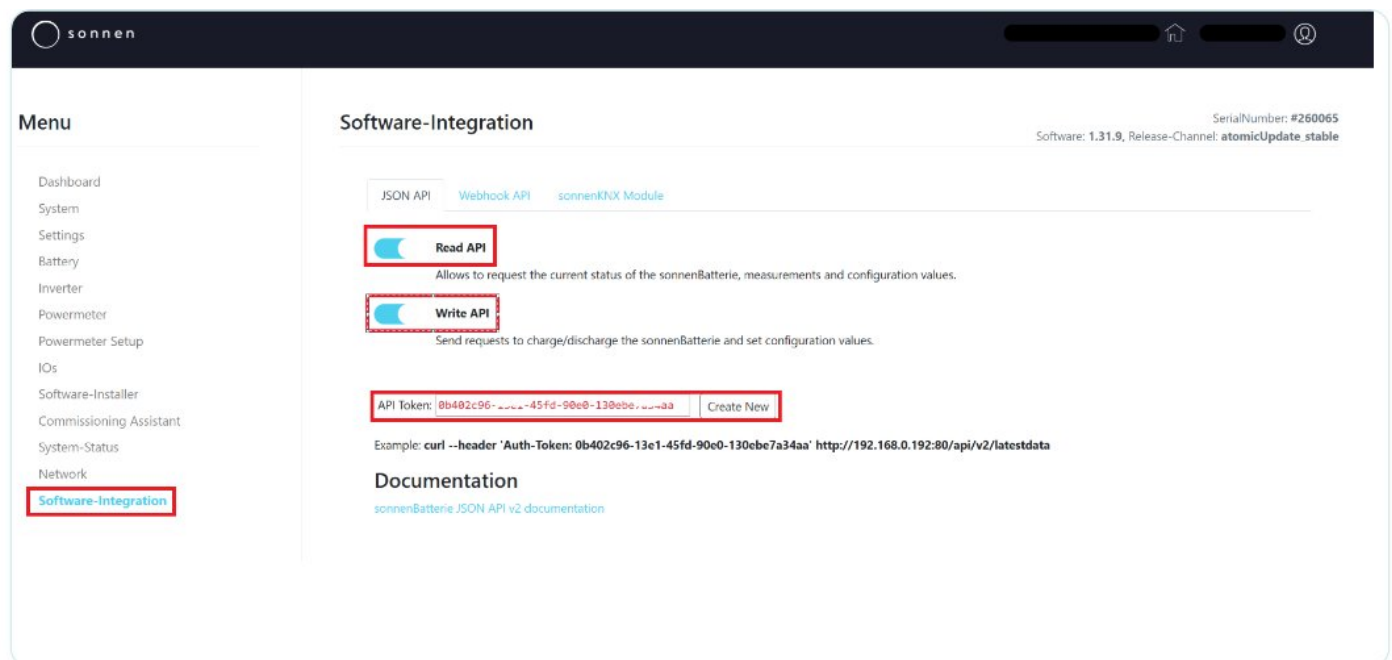
API token

You need the API token to add the Sonnen system to Reduxi (see [Point 6](#)).



VPP

Disconnect the battery from the VPP (virtual power plant) to enable and configure the **Write API** option.

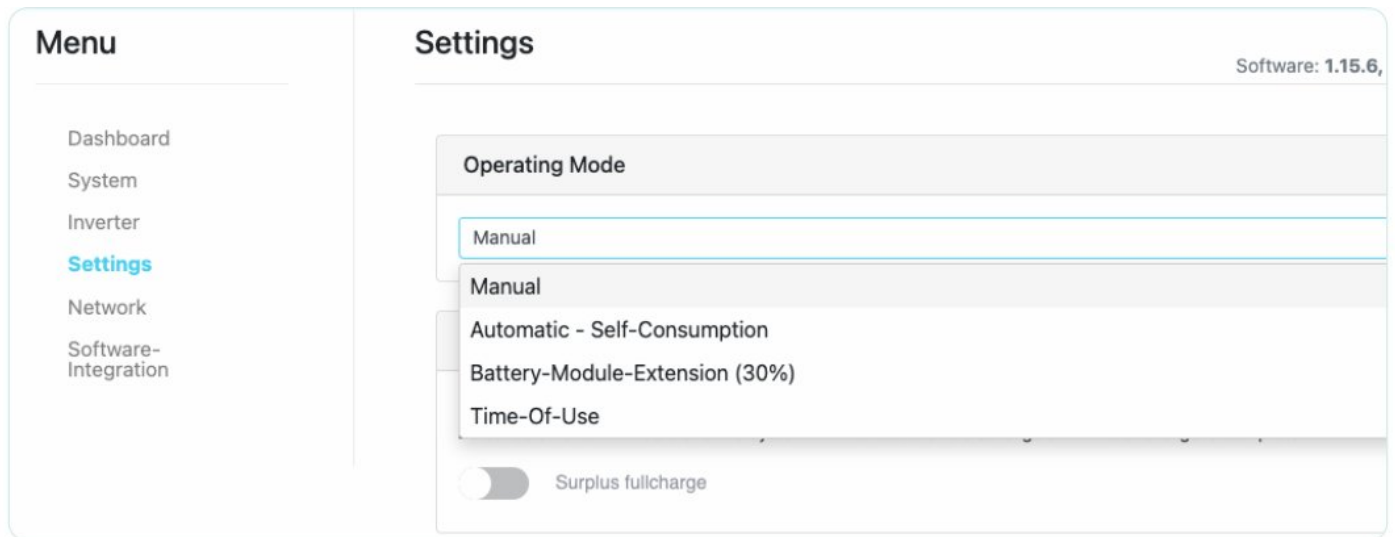


Software Integration: Read API, Write API and API token

Text description of this image

4.4 Set the operating mode

Open the **Settings** menu on the left side and select the operating mode **Manual**.



Operating mode Manual

Text description of this image

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

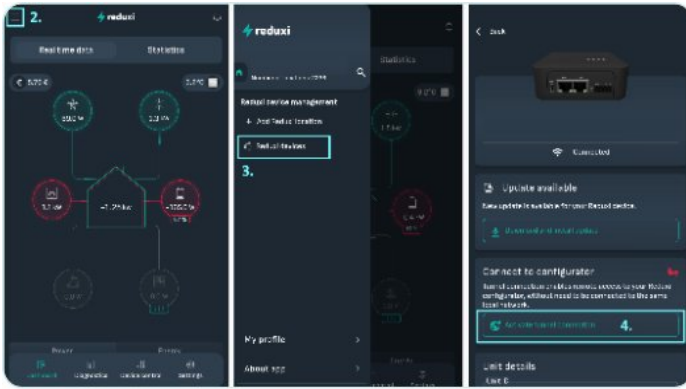
Activate the tunnel connection

Switch on the tunnel connection and wait a moment until it is active.

4

Open the configurator

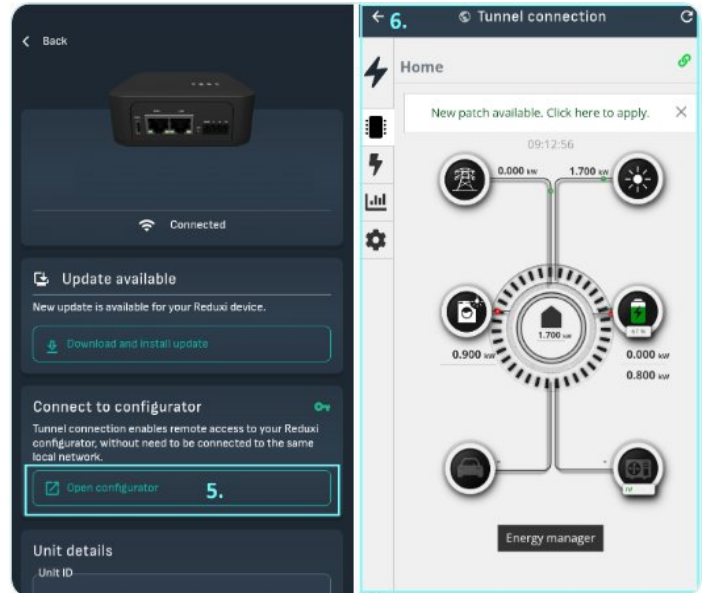
Tap **Open configurator**. The Reduxi web interface opens.



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

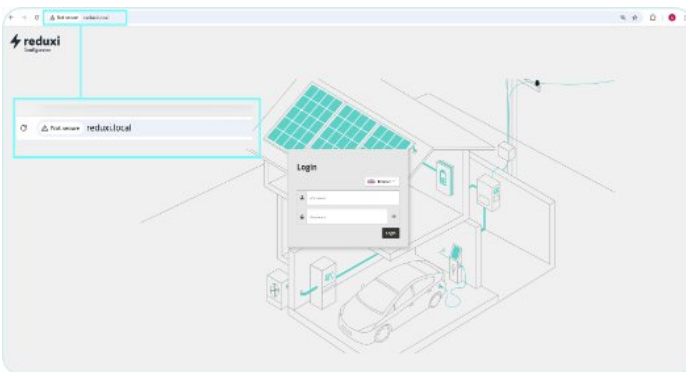
5.2 Via a web browser

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**.

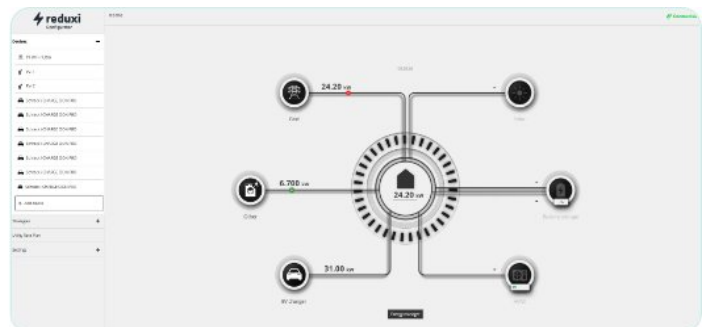
2 Log in

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 sonnenBatterie to Reduxi

Use these steps to add a new device to the Reduxi Controller.

6.1 Basic settings

Log in to the [Reduxi Configurator](#) (see [Point 5](#); see also [How to log in to Reduxi Configurator via browser](#)) and click **+ Add device**.



Devices



+ Add device

Strategies



Utility Rate Plan

Settings



The + Add device button

Text description of this image

In the first step, define the basic settings:

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

Basic settings

Device type *

Hybrid inverter

Type *

Sonnen

Name *

Sonnen

Include to strategy

Strategy	Measurement devices	Regulated devices
Energy manager	☐	☐
Energy manager	☐	☐

Back

Next

Basic settings: device type, type and name

Text description of this image

Click **Next**.

6.2 Communication settings

PARAMETER	VALUE
Connection	TCP/IP
IP	IP address of the sonnenBatterie
API token	The API token from Point 4 , Point 4.3
PV	Choose the inverter type: AC-coupled (battery and inverter are separate) or Hybrid (battery and inverter are integrated into one system)

Communication channel and device configuration

Connection *
TCP/IP

IP *
[Empty field] [Scan for IP]

Port *
80

Extended IP recovery ⓘ
Yes

API token *

API token is located in inverter web interface in section Software-Integration / JSON API

PV
Yes

Is PV meter installed?

Number of all system units *
1

Number of all system units primary + secondary

What is type of inverter *
AC coupled system

Type of inverter

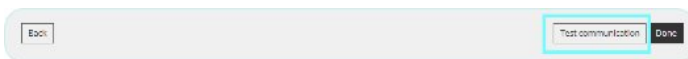
Back [Test communication] Done

Communication settings

Text description of this image

6.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the sonnenBatterie 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'.

Communication channel and device configuration

Connection *
TCP/IP

IP *
192.168.20.243 [Scan for IP]

Port *
202 [Find port]

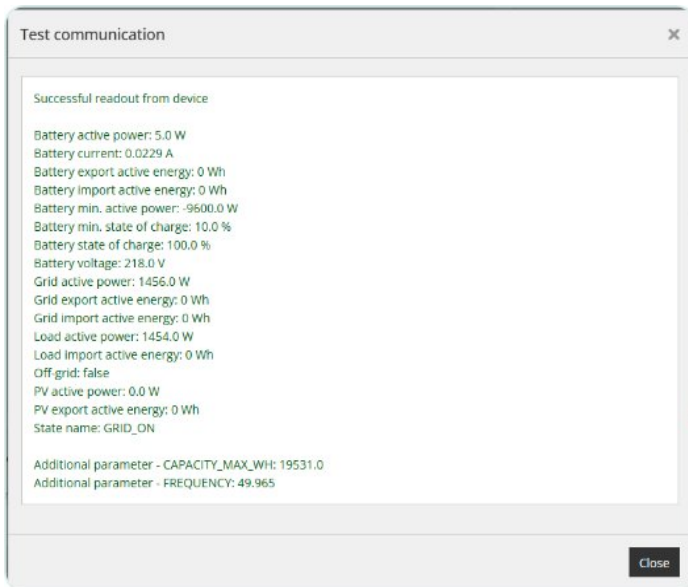
Modbus unit ID *
1

Back [Test communication] Done

The **Done** button

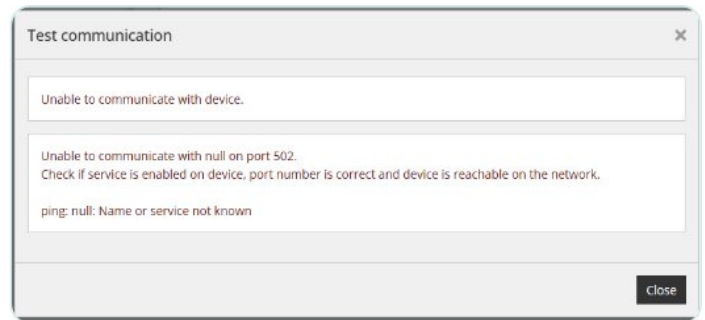
2. Text description of this image

The test returns one of two results:



1. Successful readout: the connection works

Text description of this image



2. Failed test: the system is not configured correctly

2. Text description of this image

Screenshot of a dialog titled Test communication (close X at top right). First box: Unable to communicate with device. Second box with red text: Unable to communicate with null on port 502. Check if service is enabled on device, port number is correct and device is reachable on the network. ping: null: Name or service not known

If you get the message "Unable to communicate with device", check the settings (see [Point 8](#)).

7 Check the readings and set up strategies

7.1 Last measurements

After communication is established, check the measured values under **Devices – your Sonnen device – Last measurements** in the [Reduxi Configurator](#).

7.2 Reduxi Cloud

How to add and connect the controller to the Reduxi Cloud: [Reduxi Cloud](#)

7.3 Strategies

To set up strategies and the AI Energy Manager, use the documentation below.



Energy market price list

To use the AI Energy Manager, you have to set up an energy market price list.

- [How to set up electricity price lists in Reduxi Cloud](#)
- [Strategies for Reduxi controller](#)
- [Reduxi AI strategies](#)

8 Checklist

Review this checklist for proper setup and reliable operation.

| 8.1 On the Reduxi Controller

- ☐ **IP address:** The correct IP address is entered for the connected device.
- ☐ **API token:** A valid API token is entered.
- ☐ **System type:** The correct system type is selected: **AC-coupled** or **Hybrid**.
- ☐ **Communication test:** The communication test is completed successfully.
- ☐ **Reachability:** The device IP address is reachable from the Reduxi Controller.

| 8.2 On the sonnenBatterie web interface

- ☐ **API permissions:** Both **Read API** and **Write API** are enabled.
- ☐ **Operating mode:** The operating mode is **Manual**.

| 8.3 Strategy

- ☐ **Active strategy:** The selected strategy is set to **Active**.
- ☐ **AI energy optimization:** AI Energy Manager optimization is enabled in the strategy.
- ☐ **Single active strategy:** Only one strategy is active at a time.
- ☐ **Import/export limits:** The import and export limits are defined and configured.

✓ Summary

Preparation (Points 1–3): Prepare the local IP address, the installer password and a computer in the same network. Open the web interface of the sonnenBatterie.

sonnenBatterie (Point 4): Log in as Installer, enable **Read API** and **Write API**, copy or create the API token and set the operating mode to **Manual**.

Add to Reduxi (Points 5–6): Open the Configurator and add the device with type **Sonnen**. Enter IP address, API token and the inverter type (**AC-coupled** or **Hybrid**). Run **Test communication**.

Go live (Points 7–8): Check the readings, set up the strategies and go through the checklist.

→ Common issues

ISSUE	SOLUTION
Test communication shows "Unable to communicate with device"	The system is not configured correctly. Check the IP address, the API token, the system type (AC-coupled or Hybrid) and that the IP address is reachable from the controller (see Point 8).
Installer login is not possible	The installer password is not available to end users. Contact the installer who commissioned the system or Sonnen support (see Point 4).
No API token available	Open Software Integration in the sonnenBatterie web interface and click Create new at the bottom of the page.
Reduxi commands have no effect on the battery	Check that the operating mode is Manual , that Read API and Write API are enabled, that the strategy is Active and that only one strategy is active (see Point 8).
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 admin is rejected	The password was changed during installation. Ask the installer. The Reduxi account password does not work here.
reduxi.local 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:



How to connect sonnenBatterie with Reduxi controller

General guide: JSON API connection and video tutorials



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