

How to connect SunSpec energy meter with Reduxi controller

Connect an energy meter with a SunSpec Modbus interface to the Reduxi Controller.

🔗 Energy meter · Reduxi Controller

🌐 SunSpec Modbus 12 34 Modbus unit ID: normally 1

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1 Technical documentation

Find the instructions to connect and configure the meter on the manufacturer's page. SunSpec itself publishes the Modbus specification. To access the download portal, ask SunSpec for registration.

- [SunSpec downloads](#) – Download portal of the SunSpec Alliance. Registration required.
- [SunSpec Information Model Specification](#) – Structure of the SunSpec Modbus register map and the model definitions.
- [SunSpec Inverter Models](#) – Inverter models of the SunSpec Alliance (version 1.5, draft).

For the meter documentation, you can also search directly for PDF documents: [energy meter SunSpec documentation](#).

2 Required equipment

- ☐ Energy meter with a SunSpec Modbus interface
- ☐ Reduxi Controller
- ☐ Communication cable between the meter and the Reduxi Controller, as described in the meter manual
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

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 <code>reduxi.local</code>
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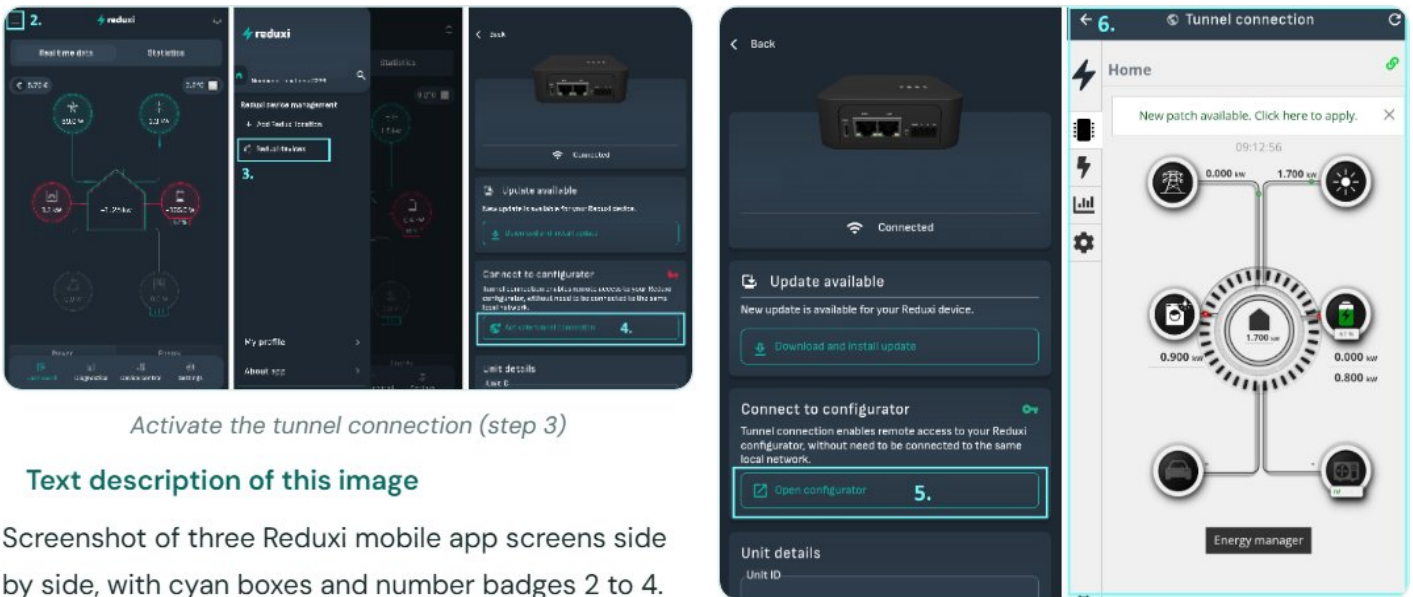
3.1 Via the Reduxi app

- 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)

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**.

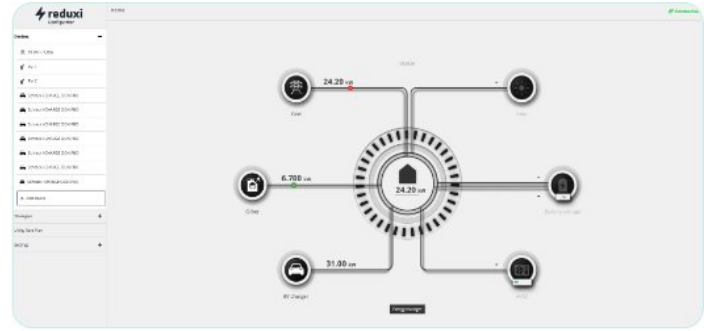
2

Log in

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



Reduxi Controller login screen



Controller web interface after login

Text description of this image

2. Text description of this image

Screenshot of the Reduxi Configurator web interface

4 Add the energy meter to Reduxi

Use these steps to add a new energy meter or to edit an existing one.

4.1 Basic settings

Log in to the [Reduxi Configurator via the browser](#) (see [Point 3](#)). Click **+ Add device**.

In the first step, enter the basic settings of the device: device type, type and a name of your choice.

4.2 Communication settings

Select the communication channel. Then enter the device configuration:

PARAMETER	VALUE
Modbus unit ID	Normally 1 is used.

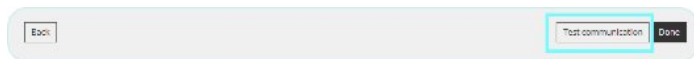
Take the other connection parameters from the meter manual.

4.3 Advanced settings

Enter and choose the advanced settings.

4.4 Test communication

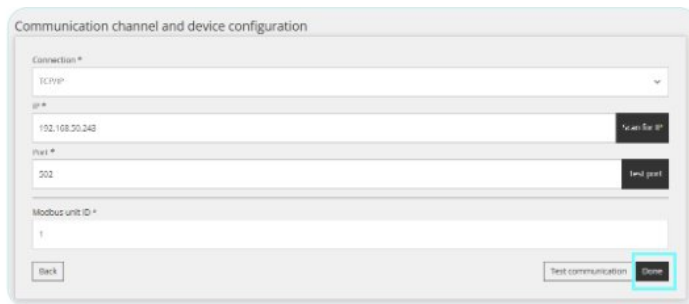
Click **Test communication** at the bottom of the wizard. It reads the energy meter once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.



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

Communication channel and device configuration

5 Check the readings

5.1 Last measurements

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

5.2 Enable control by Reduxi

Set the **control type** of the device as required. For strategies, see [Strategies for Reduxi controller](#).

✓ Summary

Preparation (Points 1–2): Get the SunSpec and meter documentation. Prepare the meter, the Reduxi Controller and the cable.

Log in (Point 3): Log in to the Reduxi Configurator.

Add to Reduxi (Point 4): Add the device, select the communication channel, enter the Modbus unit ID (normally 1) and test communication.

Go live (Point 5): Check the readings and set the control type.

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check the communication channel and the Modbus unit ID (normally 1) against the meter manual.
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:



SunSpec Information Model Specification

Structure of the SunSpec Modbus register map.



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