

How to add Solar Power Plant Huawei SUN2000?

Connect your Huawei SUN2000 inverter to the Reduxi Controller via Modbus.

🔧 Huawei SUN2000 · Reduxi Controller 🌐 Modbus

📖 Modbus unit ID: normally 1



📄 IN THIS ARTICLE

1. Technical documentation
2. Required equipment
3. Connect and configure the inverter
 - Connect and configure on the Huawei side
 - Enable Modbus TCP
4. Log in to the Reduxi web interface
 - Via the Reduxi app
 - Via a web browser
5. Add the Huawei SUN2000 to Reduxi
 - Basic settings
 - Communication settings
 - Test communication
6. Check the readings
7. Summary
8. Common issues
9. Related articles

1 Technical documentation

Manufacturer pages and manuals:

- [Huawei SUN2000 support page](#) – Instructions to connect and configure the inverter (Huawei support site)
- [Huawei Digital Power Information Center](#) – Technical documents and videos for Huawei solar products
- [Huawei SUN2000 – Dongle Setup and Configuration Guide](#) – Reduxi guide: set up the Huawei Smart Dongle and its internet access

2 Required equipment

You need:

- ☐ Reduxi Controller
- ☐ Huawei SUN2000 inverter
- ☐ Communication connection between the Reduxi Controller and the inverter, as described by Huawei (see [Point 1](#))
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

3 Connect and configure the inverter

3.1 Connect and configure on the Huawei side

Find the instructions to connect and configure the inverter on the manufacturer web page:

<https://support.huawei.com/enterprise/en/fusionsolar/sun2000-pid-7551590>

3.2 Enable Modbus TCP

If you connect through the Huawei Smart Dongle, enable Modbus TCP in the FusionSolar app: **Settings – Communication configuration – Dongle parameter settings – Modbus-TCP**. Set it to **Enable (unrestricted)**. It is disabled by default. The default TCP port is **502**. Installer access is required.

To set up the dongle itself, see [Huawei SUN2000 – Dongle Setup and Configuration Guide](#).

4 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`

4.1 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

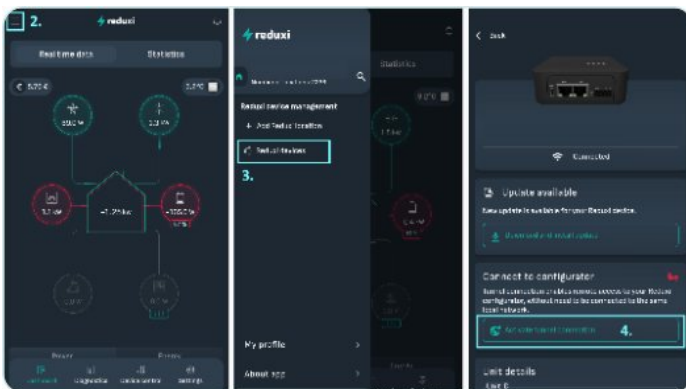
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

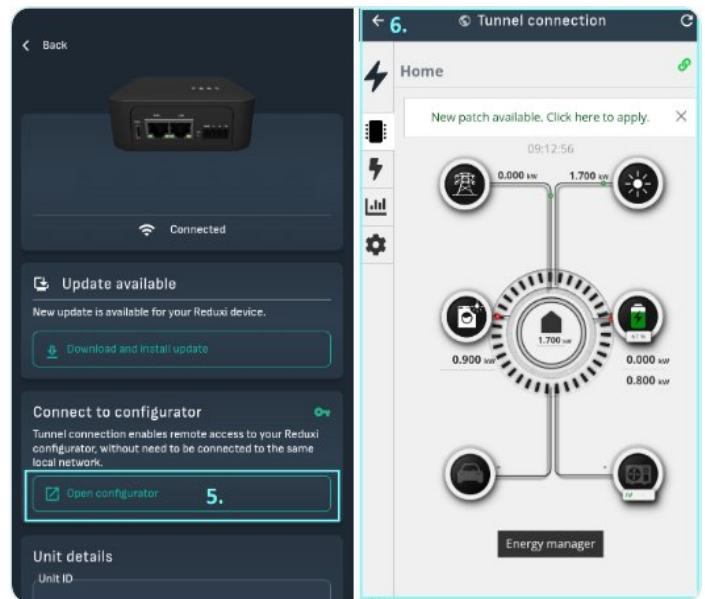
Switch on the tunnel connection and wait a moment until it is active.

4 Open the configurator

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



Activate the tunnel connection (step 3)



Open configurator (step 4)

4.2 Via a web browser

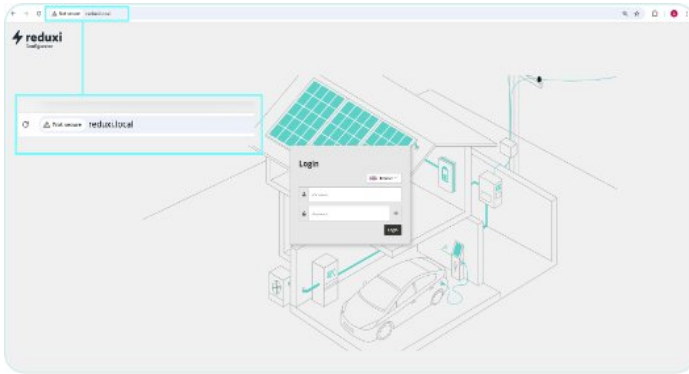
1 Open the login page

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**.

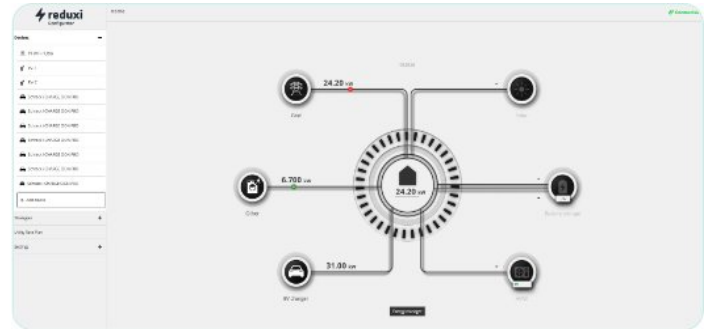
2

Log in

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



Reduxi Controller login screen



Controller web interface after login

5 Add the Huawei SUN2000 to Reduxi

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

5.1 Basic settings

Log in to the [Reduxi Configurator](#) (see [Point 4](#)) and click **+ Add device**. Then enter the basic settings:

- Device type: **Solar Power Plant**
- Type: **Huawei SUN2000**
- Name: a name of your choice, for example **Huawei SUN2000**

Click **Next**.

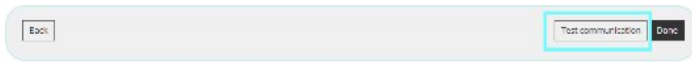
5.2 Communication settings

Select the communication channel and enter the device configuration:

PARAMETER	VALUE
Communication channel	The channel you use to connect the inverter (see Point 2)
Modbus unit ID	Normally 1
Advanced settings	Enter and choose the advanced settings as needed

5.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the Huawei SUN2000 once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.



The **Test communication** button



The **Done** button

6 Check the readings

6.1 Last measurements

After communication is established, check the values under **Devices – Huawei SUN2000** in the [Reduxi Configurator](#).

6.2 Enable control by Reduxi

For control by the Reduxi strategies, set the **control type** of the device to **AUTO** under **Devices – Huawei SUN2000**. Only then do strategy commands affect the inverter.

To reduce energy costs with dynamic prices and tariffs, define a strategy as described in [Strategies for Reduxi controller](#).

✓ Summary

Preparation (Points 1–2): Check the Huawei documentation and prepare the equipment.

Huawei SUN2000 (Point 3): Connect and configure the inverter and enable Modbus TCP.

Plant **Huawei SUN2000** **Solar Power**
(normally **1**), run **Test communication** and click **Done**.

Go live (Point 6): Check the last measurements and set the **control type** to **AUTO** .

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check that Modbus TCP is enabled on the inverter or dongle (see Point 3.2) and that the Modbus unit ID matches. It is normally 1 .
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:



Huawei SUN2000 – Dongle Setup and Configuration Guide

Set up the Huawei Smart Dongle: local connection and internet access



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