

How to add SolarEdge Solar Power Plant Inverter with SolarEdge SetApp application to Reduxi Controller?

Configure the SolarEdge inverter for Modbus TCP communication and add it to the Reduxi Controller.

🔧 SolarEdge inverter · Reduxi Controller

🌐 Modbus TCP (port 1502) or RS485

📄 Modbus unit ID: normally 1

The SolarEdge logo, featuring the word "solar" in black and "edge" in white with a red underline, all within a white rounded rectangle.

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1 Prepare the SolarEdge inverter

1.1 Required equipment

- ☐ Reduxi Controller
- ☐ SolarEdge inverter
- ☐ SolarEdge SetApp application
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

1.2 Important note

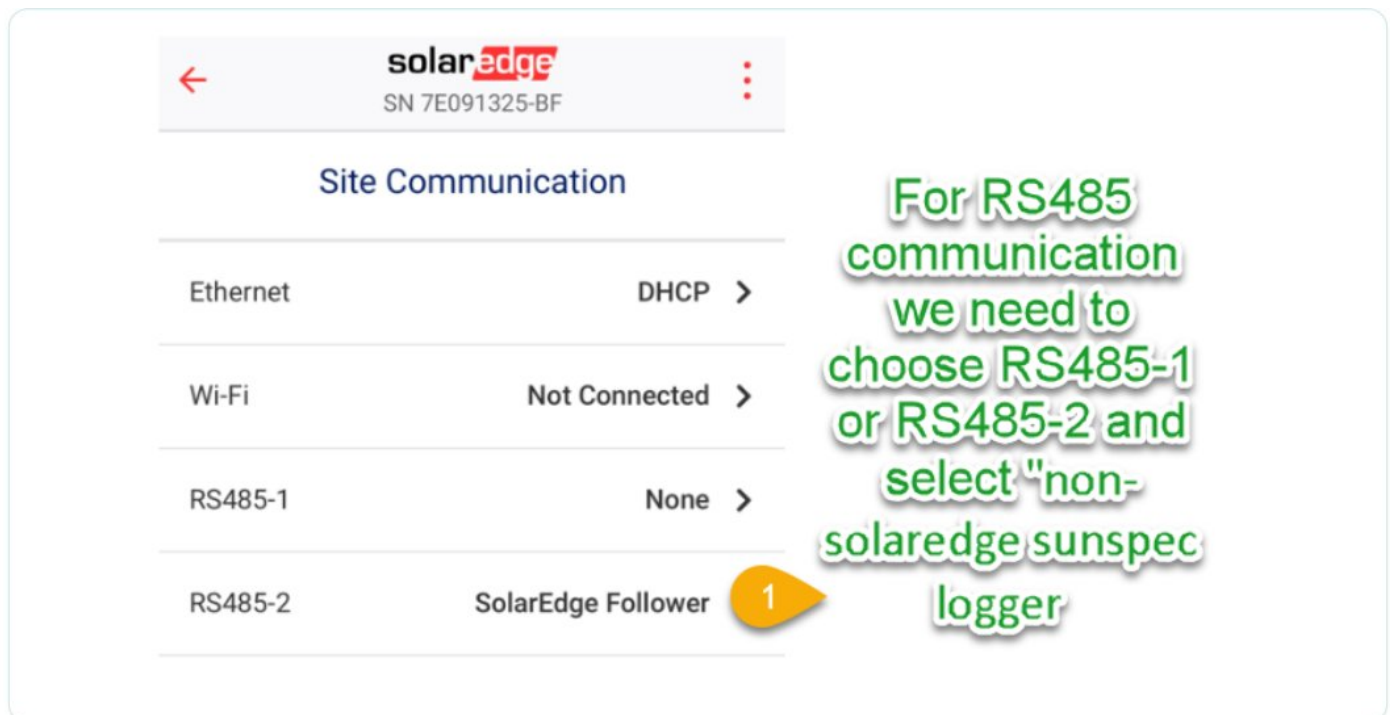


Important

Only residential inverters with firmware version 4.xx.xx and rated power below 17 kW can use a Wi-Fi internet connection for Modbus TCP/IP. All other inverters need a UTP (Ethernet) connection for Modbus TCP/IP communication.

1.3 RS485 connection

To connect over RS485, select the RS485 port on the inverter to which you connected the Reduxi Controller. After you select the RS485 port, set the option to **Non-SolarEdge SunSpec logger**. You can check the device ID and the baud rate there.



RS485 port options on the inverter

For several inverters on one RS485 bus, see [SolarEdge serial connection to Reduxi](#).

1.4 SolarEdge Wi-Fi connection

To connect SolarEdge to the Reduxi system over Wi-Fi, use the Reduxi Gateway.

1.5 TCP connection

Before you add the SolarEdge inverter to the Reduxi Controller, enable Modbus TCP communication and change the IP configuration from **Dynamic** to **Static IP**.



Why a static IP

If the DHCP option is used, the IP address of the SolarEdge inverter changes constantly. You then have to adjust the IP in the Reduxi Configurator each time. Otherwise a communication error occurs.

1

Download and install SolarEdge SetApp

Download and install the application: [SolarEdge SetApp](#).

2

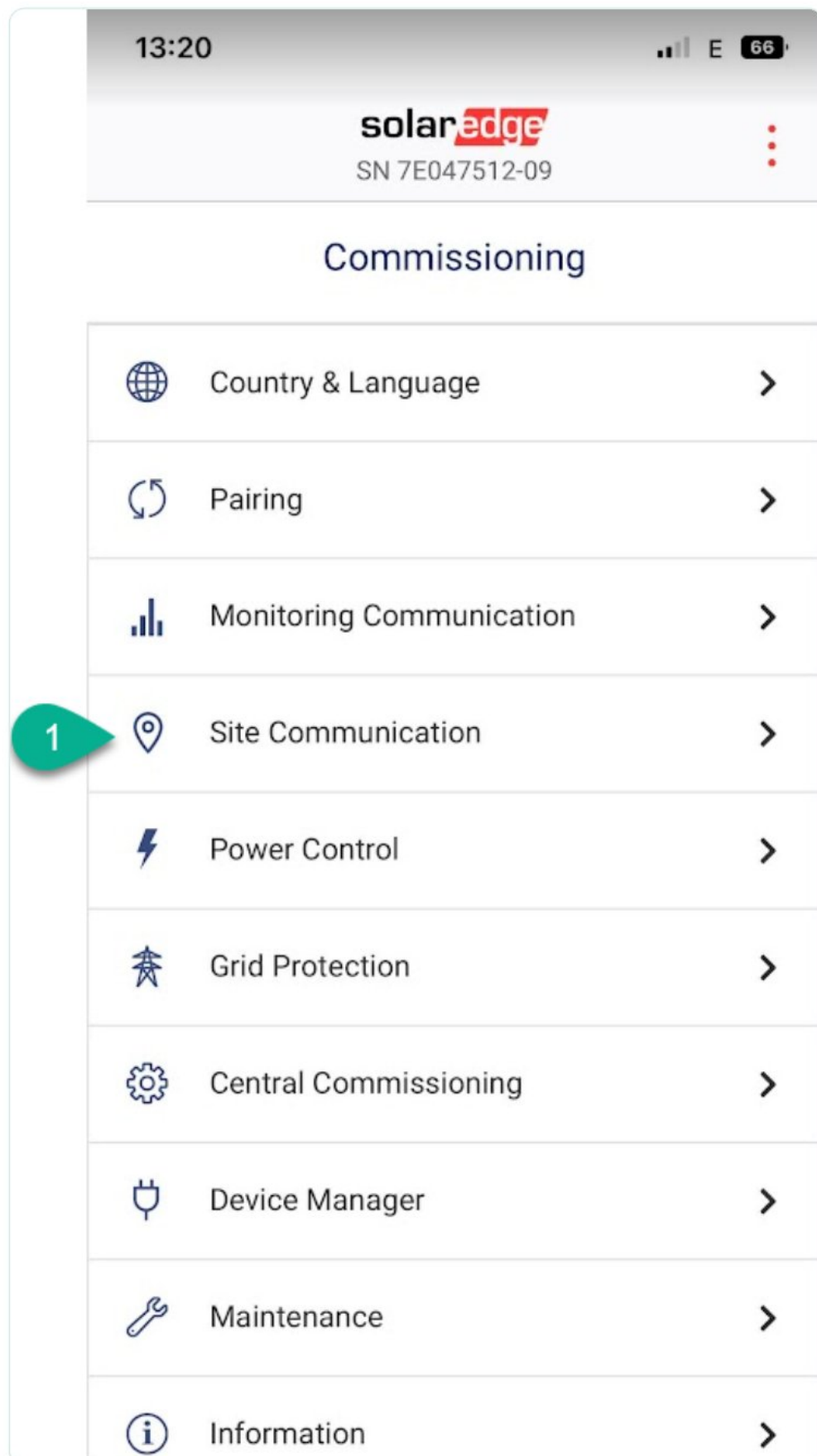
Connect, pair and configure the device

Connect to the inverter with SetApp, pair it and open the configuration.

3

Click Site Communication

Select **Site Communication**.

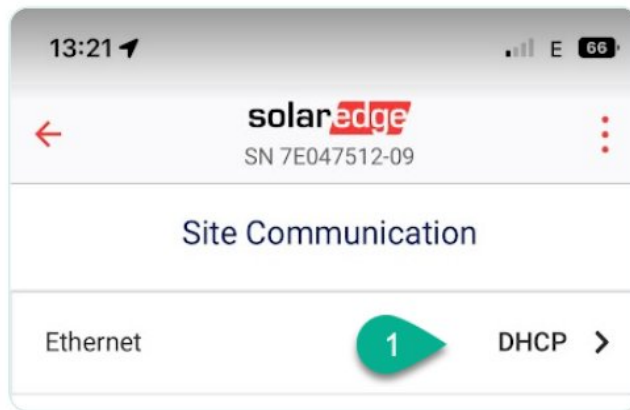


Site Communication in SetApp

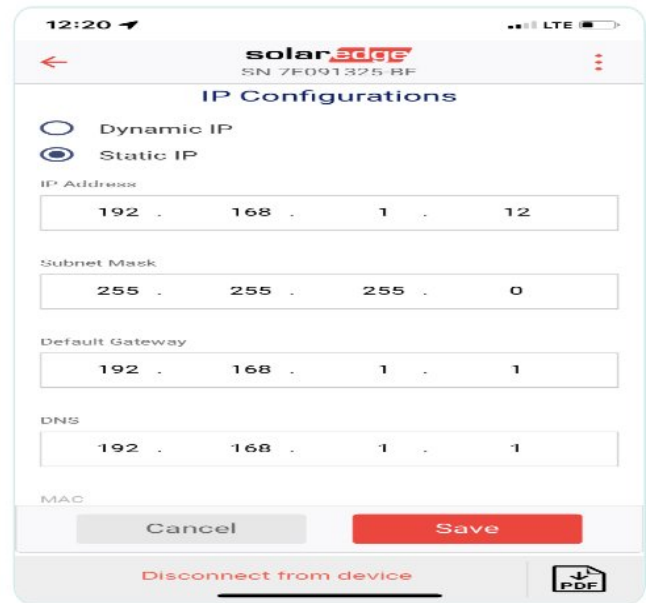
4

Change DHCP to Static

Change the IP configuration from **DHCP** to **Static** and enter the static IP address.



DHCP setting



Static IP setting

5

Go back to Site Communication

Click back to **Site Communication**.

6

Click Modbus TCP portSelect the **Modbus TCP** port.

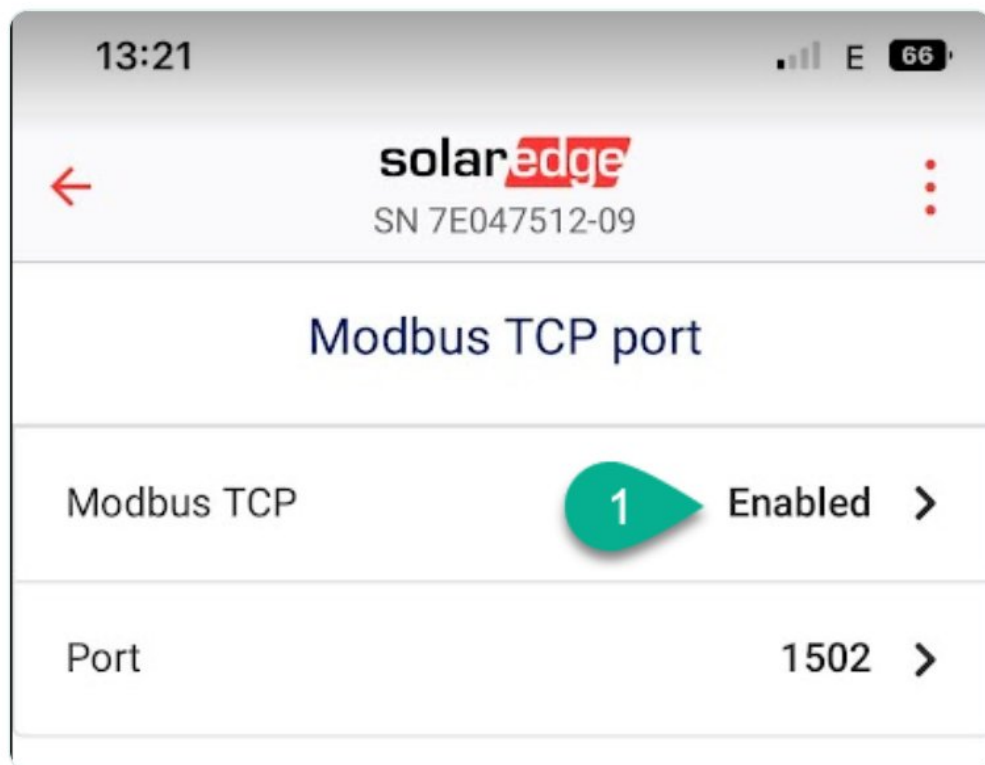
 solar edge  SN 7E047512-09		
Site Communication		
Ethernet	DHCP	>
Wi-Fi	Not Connected	>
RS485-1	Modbus (Multi-Device)	>
RS485-2	SolarEdge Follower	>
GPIO	Power Reduction Interface (RRCR)	>
Modbus TCP port	1502	>
CAN	LGC RESU 10	>

Modbus TCP port entry

7

Enable Modbus TCP

Enable Modbus TCP.

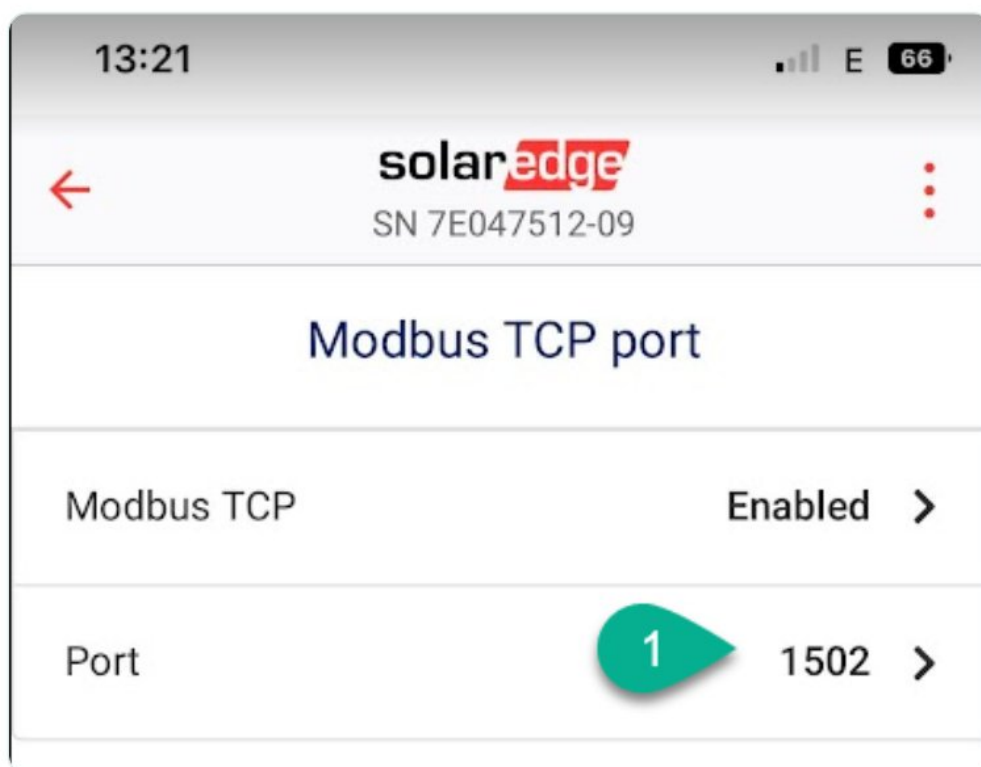


Modbus TCP enabled

8

Configure port 1502

Set the port to **1502**.



Modbus TCP port 1502

2 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 reduxि.local



2.1 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

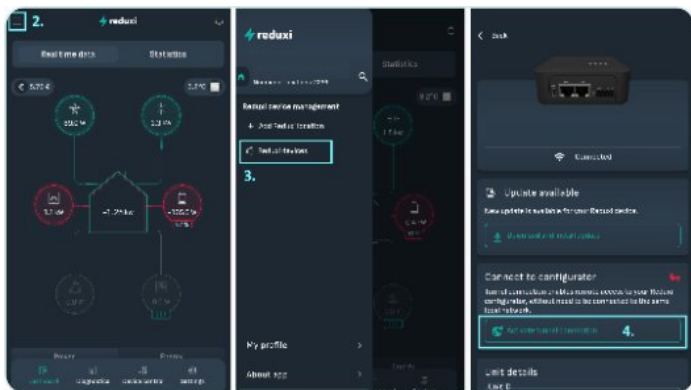
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

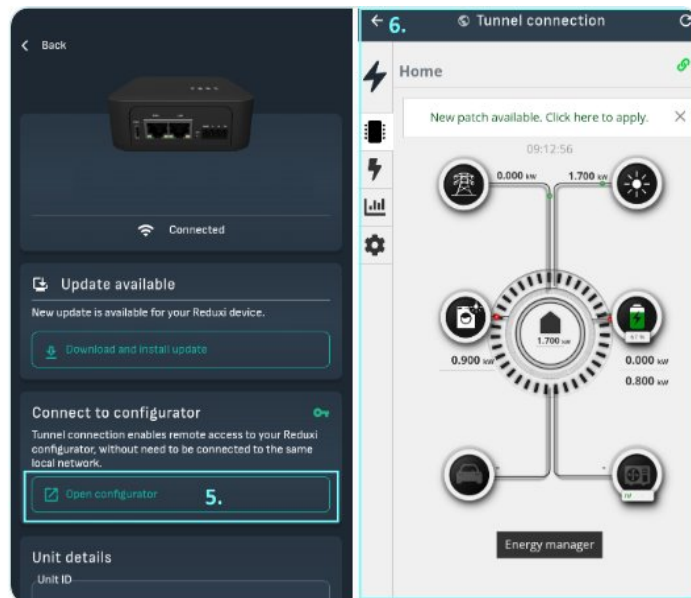
Switch on the tunnel connection and wait a moment until it is active.

4 Open the configurator

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



Activate the tunnel connection (step 3)



Open configurator (step 4)

2.2 Via a web browser

1 Open the login page

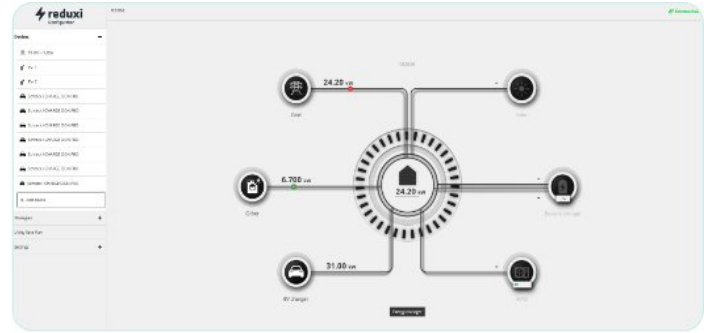
On a device in the same network, open a web browser and enter the controller's IP address or **http://reduxi.local**. You can find the controller's IP address in your router's device list or in the Reduxi app under **Reduxi devices**.

2 Log in

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



Reduxi Controller login screen



Controller web interface after login

3 Add the SolarEdge inverter to Reduxi

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

3.1 Basic settings

Log in to the [Reduxi Configurator via the browser](#) (see [Point 2](#)). Click **+ Add device** and enter the basic settings of the inverter.

3.2 Communication settings

Select the communication channel. Enter the settings you used under **Site Communication** in the SolarEdge SetApp application:

PARAMETER	VALUE
Connection	TCP/IP (or the RS485 settings from Point 1)
IP	The static IP address you set in SetApp
Port	1502

3.3 Device configuration

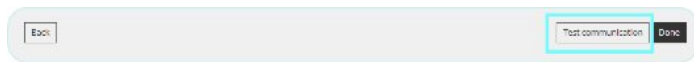
Modbus unit ID: normally **1** is used.

3.4 Advanced settings

Enter and select the advanced settings of the device.

3.5 Test communication

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



The **Test communication** button



The **Done** button

4 Check the readings

4.1 Last measurements

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

4.2 Enable control by Reduxi

For advanced control, integrate the inverter into the Reduxi strategy. Under **Devices** in the Reduxi Configurator, set the **control type** to **AUTO**. 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): Enable Modbus TCP and set a static IP in SolarEdge SetApp, port 1502. Then log in to the Reduxi Configurator.

SolarEdge inverter (Point 1): Only residential inverters with firmware 4.xx.xx and below 17 kW can use Wi-Fi. All others need a UTP connection.

Add to Reduxi (Points 2–3): Click + Add device, enter the SetApp settings, set the Modbus unit ID and run Test communication.

Go live (Point 4): Check the last measurements and set the control type to AUTO.

→ Common issues

ISSUE	SOLUTION
Communication error after some time	The inverter uses DHCP and its IP changed. Set a static IP in SolarEdge SetApp and enter it in the Reduxi Configurator (see Point 1).
Inverter cannot connect over Wi-Fi	Only residential inverters with firmware 4.xx.xx and below 17 kW support Wi-Fi for Modbus TCP/IP. Others need a UTP connection, or use the Reduxi Gateway.
RS485 connection does not work	Select the RS485 port the controller is connected to. Set Non-SolarEdge SunSpec logger and check device ID and baud rate.
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:



SolarEdge serial connection to Reduxi

Connect several SolarEdge inverters in a master and slave RS485 setup.



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