

How to connect GARO GNM3D/T Series energy meter with Reduxi controller

Add your GARO GNM3D or GNM3T energy meter to the Reduxi Controller via Modbus RS485.

🔧 GARO GNM3D/T energy meter · Reduxi Controller

🌐 Modbus RTU over RS485

📄 Modbus unit ID: normally 1



GARO GNM3D RS485 energy meter

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1 Technical documentation

Find the instructions to connect and configure the meter on the manufacturer web page.

- [GARO: GNM3D search](#) – Link from the original article.
- [GARO: Disc.ENERGYMETER 3P MODBUS RS485 \(GNM3D\)](#) – Product page of the three-phase direct meter with Modbus RS485.
- [GARO: GNM3D-RS485 manual \(EN\)](#) – Manual with the RS485 connection and the meter communication settings.
- [GARO: GNM3T-LP RS485 N manual \(EN\)](#) – Manual of the CT-connected GNM3T variant.
- [GARO: GNM3D and GNM3T Modbus protocol \(EN\)](#) – Modbus RTU register tables and serial settings.

2 Required equipment

- ☐ Reduxi Controller
- ☐ GARO energy meter GNM3D or GNM3T with RS485 (Modbus) interface
- ☐ RS485 cable between the meter and the Reduxi Controller
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

3 Meter communication settings

3.1 Default settings

The meter communicates over RS485 with Modbus RTU. The manufacturer protocol document lists these default settings:

PARAMETER	DEFAULT VALUE
Protocol	Modbus RTU over RS485
Modbus address	1 (range 1 to 247)
Baud rate	9.6 kbps
Parity	None
Stop bits	1



Note

The settings in the Reduxi Configurator must match the settings on the meter. Check the meter manual for your model for the RS485 terminals.

3.2 Set the Modbus address on the meter

Use this procedure only if the address, baud rate or parity on the meter differ from the values you need. The steps follow the GNM3D-RS485 manual and use the touch areas on the meter front:

1

Open the settings

Long-press the center touch area until **PASS** appears. Long-press the left and right touch areas together to skip the password.

2

Set the address

Click the left touch area until **AddrESS** appears. Long-press the touch area. Click left or right to change the blinking digit and long-press to move to the next digit. Long-press to confirm.

3

Set baud rate and parity

Click left until **bAud** appears and select **9.6**. Click left until **PArity** appears and select **no**. Confirm the stop bit **1**.

4

Save

Click left until **End** appears. Long-press the center touch area to save.

4 Log in to the Reduxi web interface

You can open the Reduxi web interface in two ways:

**REMOTE**

Reduxi app

Via tunnel connection · works from anywhere



Web browser

In the local network · via IP address or reduxि.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

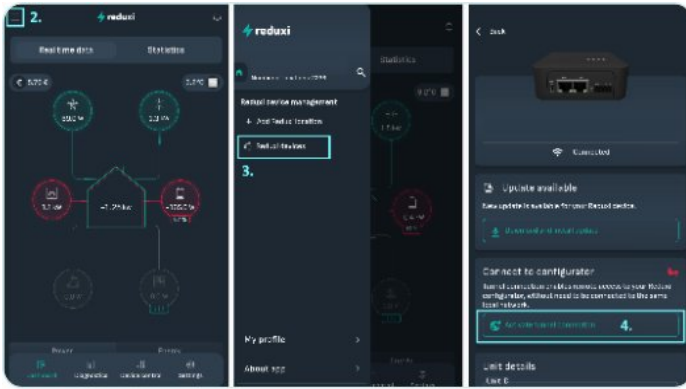
Activate the tunnel connection

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

4

Open the configurator

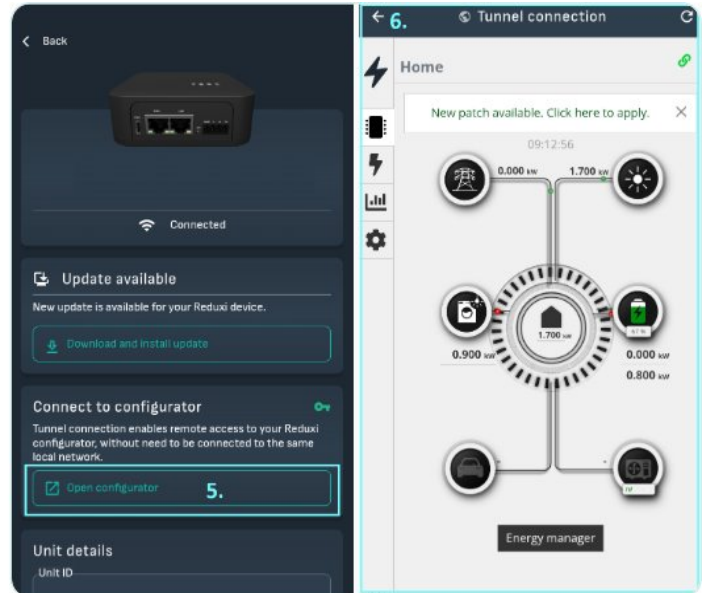
Tap **Open configurator**. The Reduxi web interface opens.



Activate the tunnel connection (step 3)

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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)

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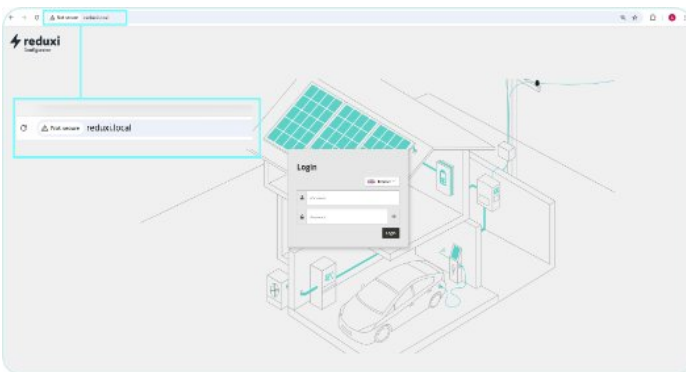
4.2 Via a web browser

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**.

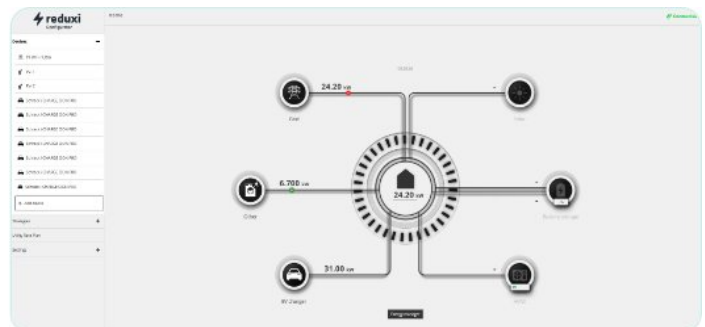
2 Log in

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



Reduxi Controller login screen

Text description of this image



Controller web interface after login

2. Text description of this image

Screenshot of the Reduxi Configurator web interface

5 Add the energy meter to Reduxi

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

5.1 Basic settings

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

5.2 Communication settings

Select the communication channel. Then enter the device configuration.

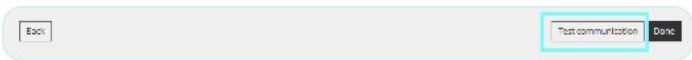
PARAMETER	VALUE
Modbus unit ID	Normally 1 is used. It must match the address set on the meter (Point 3).

5.3 Advanced settings

Enter and choose the advanced settings.

5.4 Test communication

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

6 Check the readings

6.1 Last measurements

After communication is established, check the values of the energy meter under **Devices** in the Reduxi Configurator as an additional test.

✓ Summary

Preparation (Points 1–2): Open the manufacturer documents and gather the Reduxi Controller, the RS485 cable and a laptop.

Energy meter (Point 3): Check the Modbus address, baud rate and parity on the meter.

Add to Reduxi (Points 4–5): Log in to the Reduxi Configurator, add the device and run Test communication.

Go live (Point 6): Check the readings of the meter under Devices.

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check that the Modbus unit ID, baud rate and parity in Reduxi match the meter settings (Points 3 and 5.2). Check the RS485 wiring.
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:



GARO energy meters

Product page of the GARO three-phase direct meter with Modbus RS485.



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