

How to connect Schrack NA96 energy meter with Reduxi controller

Connect your Schrack NA96 network analyser to the Reduxi Controller via Modbus RS485.

🔧 Schrack NA96 · Reduxi Controller

🌐 Modbus (RS485 module)

📄 Modbus unit ID normally 1



Schrack network analyser NA96 / NA96+, 96 x 96 mm

Text description of this image

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1 Technical documentation

The Schrack NA96 is a panel-mounted multifunction network analyser (96 x 96 mm, article number MGF39000). The NA96+ has higher accuracy and wider ranges. The base unit has no communication interface. RS485 is available as an optional plug-in module.

ARTICLE NUMBER

**MGF39000 (NA96),
MGF39001 (NA96+)**

MOUNTING

**Panel cut-out 92 x
92 mm**

CURRENT INPUT

**1 to 5 A, via current
transformer only**

VOLTAGE INPUT

**80 to 500 V phase-
to-phase**

INTERFACE

**RS485 plug-in
module (optional),
Modbus compatible**

PROTECTION

**IP54 front, IP20
terminals**

Instructions for connecting and configuring the meter are in the Schrack catalogue. Manufacturer documents:

- [Schrack catalogue pages: network analysers](#) – Description, specifications and RS485 module data (EN)
- [Operating manual NA96 \(SK\)](#) – RS485 module: programming menu, terminals, wiring
- [Operating manual NA96+ \(DE\)](#) – Operating manual of the NA96+
- [Mounting manual NA96+](#) – Installation of the device
- [Schrack product page: NA96+](#) – Product data and downloads

2 Required equipment

- ☐ Schrack NA96 network analyser with the RS485 plug-in module
- ☐ Data cable for RS485
- ☐ Reduxi Controller
- ☐ Laptop or tablet with internet access to configure the device in Reduxi



RS485 module

The RS485 module (Schrack article MGF3900R) is optional and fits only in slot A. Insert or remove it only with the device powered off.

3 System overview and wiring

3.1 RS485 connection

The RS485 module of the NA96 has these terminals:

TERMINAL	FUNCTION
3	Rx (+)
4	Tx (-)
5	GND

Rules for the RS485 bus:

- Connect the devices in a daisy chain, from device to device. A star topology is not allowed.
- Terminate the bus with a 120 Ω resistor on the last device.
- Up to 32 devices per bus, or up to 255 with an RS485 repeater.
- Maximum distance from the master: 1200 m.



A/B swapped

If the Reduxi Controller does not receive data although all settings are correct, swap the two RS485 wires. The A/B naming differs between manufacturers.

4 Device configuration on the meter

4.1 RS485 settings

Set the RS485 parameters in the programming menu of the NA96, according to the operating manual:

1 Start programming mode

Press the two programming buttons together. The display shows **PASS 0000**.

2 Enter the password

Set the value **1000** and confirm with the enter key.

3 Open the slot A screen

Press the enter key repeatedly until the display shows **A Addr**.

4 Address

Addr : set a value from **001** to **255** and confirm.

5 Baud rate

bAUd : select **19.2k**, **9.6k** or **4.8k** bit/s and confirm.

6 Parity

PAr : select **EUEn** (even), **odd** or **nonE** (none) and confirm.

The protocol is Modbus/JBUS compatible with 8 data bits and 1 stop bit. The Modbus unit ID is normally **1**. Note the settings. You enter the same values in Reduxi (see [Point 6](#)).

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

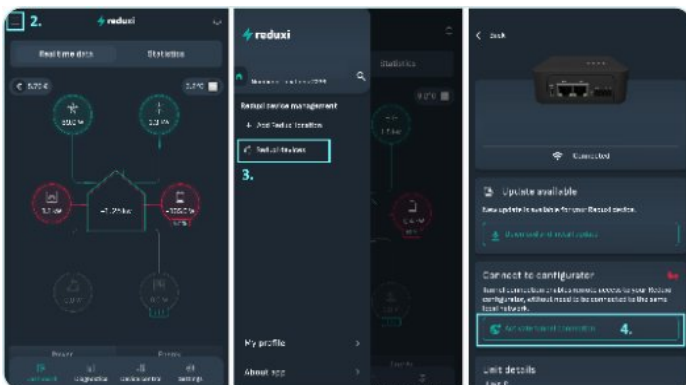
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

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

4 Open the configurator

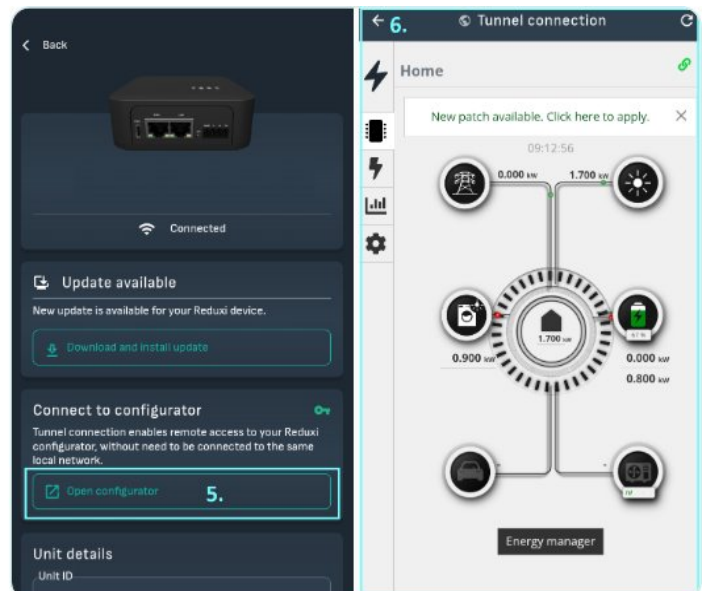
Tap **Open configurator**. The Reduxi web interface opens.



Activate the tunnel connection (step 3)

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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)

2. Text description of this image

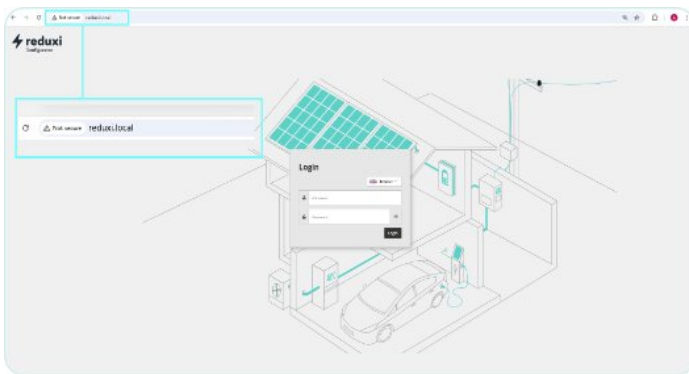
5.2 Via a web browser

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**.

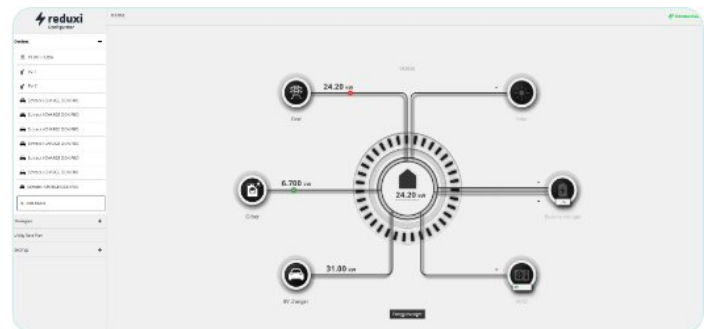
2 Log in

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



Reduxi Controller login screen

Text description of this image



Controller web interface after login

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Screenshot of the Reduxi Configurator web interface

6 Add the Schrack NA96 to Reduxi

6.1 Basic settings

Log in to the [Reduxi Configurator via the browser](#) (see [Point 5](#)).

- Click **+ Add device**.
- Enter the basic settings: device type `Energy meter`, type `Schrack NA96`, and a name of your choice.
- Press **Next**.

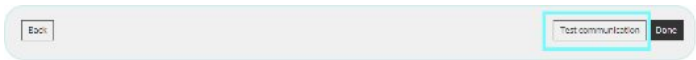
6.2 Communication settings

Select the communication channel and enter the device configuration:

PARAMETER	VALUE
Communication channel	The RS485 port of the controller the meter is connected to
Modbus unit ID	Normally 1 . Use the address set on the meter.
Baud rate and parity	Same values as set on the meter (see Point 4)
Data bits / stop bits	8 / 1
Advanced settings	Enter and choose them as needed

6.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the Schrack NA96 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

7 Check the readings

7.1 Last measurements

After communication is established, check the values under **Devices – Schrack NA96** in the Reduxi Configurator.

7.2 Use the meter in a strategy

To use the readings in the Reduxi strategy, define a strategy as described in [Strategies for Reduxi controller](#).

✓ Summary

Preparation (Points 1–2): Install the RS485 plug-in module in the NA96. Prepare the cable, the controller and a laptop or tablet.

Schrack NA96 (Points 3–4): Wire the RS485 terminals 3, 4 and 5. Set address, baud rate and parity in the programming menu.

meter

Schrack NA96

Energy

Go live (Point 7): Check the last measurements and use the meter in your strategy.

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check the Modbus unit ID, baud rate and parity against the NA96 settings. Check that the RS485 module is installed in slot A. Swap the RS485 wires A/B.
Several devices on the bus	Connect the devices in a daisy chain and terminate the last device with a 120 Ω resistor. Do not use a star topology.
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:



Schrack NA96+ product page

Product data and downloads for the NA96+



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