

How to connect Lovato Electric DMG series energy meter with Reduxi controller

Connect your Lovato Electric DMG meter to the Reduxi Controller via Modbus.

🔧 Lovato Electric DMG series · Reduxi Controller

🌐 Modbus (RS485) 📡 Modbus unit ID normally 1



Lovato Electric DMG610, one model of the DMG series

Text description of this image

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1 Technical documentation

The Lovato Electric DMG series are digital multimeters and power analyzers for energy measurement. The models differ in communication options. Reduxi reads the meter over Modbus.

MODEL	COMMUNICATION (ACCORDING TO LOVATO ELECTRIC)
DMG110, DMG210	Built-in RS485
DMG610, DMG611, DMG615	Built-in RS485; expansion modules for RS485 or Ethernet
DMG620	Built-in Ethernet; expansion modules for RS485 or Ethernet
DMG600	No built-in port; expansion module for RS485 (EXP1012) or Ethernet (EXP1013)
DMG100, DMG200	No built-in communication port



Check your model

Choose a model with an RS485 interface, built in or through an expansion module. Instructions for connecting and configuring the meter are on the manufacturer web page.

Manufacturer documents:

- [Lovato Electric catalogue: DMG series](#) – Instructions for connecting and configuring the meter
- [DMG multimeters and power analyzers](#) – Models, features and communication options
- [Manual DMG600 / DMG610](#) – Setup menu, RS485 interface and Modbus parameters

2 Required equipment

- ☐ Lovato Electric DMG meter with an RS485 interface (built in or expansion module)
- ☐ Data cable between the meter and the Reduxi Controller
- ☐ Reduxi Controller
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

3 Device configuration on the meter

3.1 Modbus settings

Set the Modbus parameters on the meter. The Modbus unit ID is normally **1**. Note the settings. You enter the same values in Reduxi (see [Point 5](#)).

Default values of the DMG610 on its built-in RS485 port COM1, according to the Lovato Electric manual:

PARAMETER	DEFAULT
Protocol	Modbus RTU
Node address	01
Baud rate	9600 bps
Data format	8 bits, no parity
Stop bits	1



Other models

Find the menu path and the defaults for your model in its manual. The settings on the meter and in Reduxi must be identical.

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

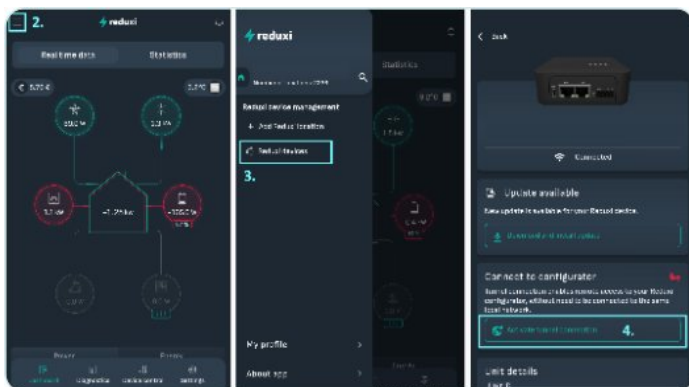
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

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

4 Open the configurator

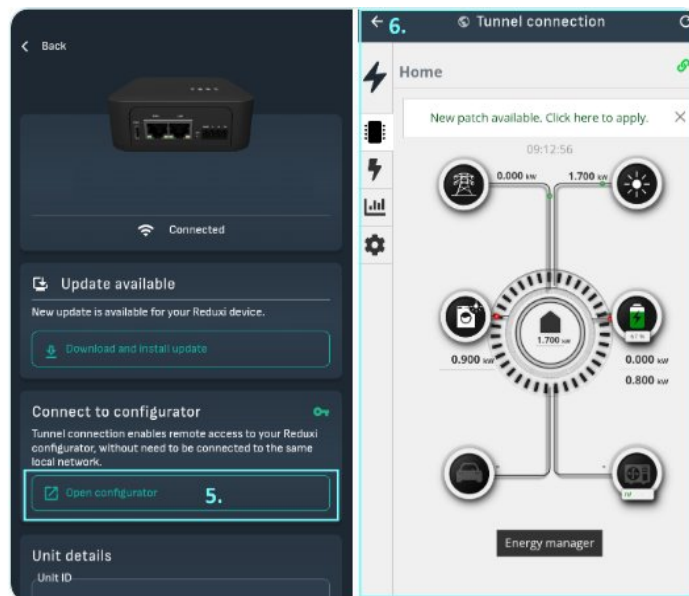
Tap **Open configurator**. The Reduxi web interface opens.



Activate the tunnel connection (step 3)

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

Screenshot of the Reduxi mobile app showing the 'Unit details' screen and the 'Tunnel connection' screen.

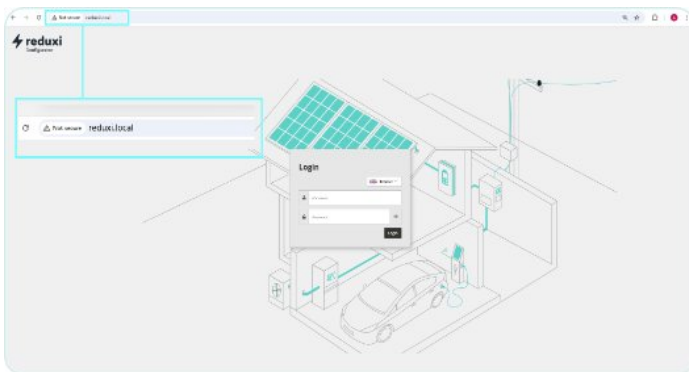
4.2 Via a web browser

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**.

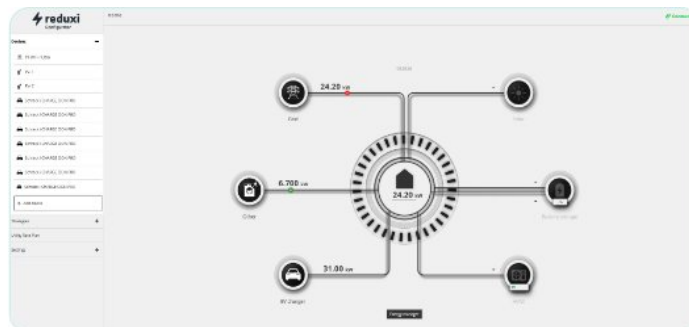
2 Log in

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 Lovato Electric DMG meter to Reduxi

5.1 Basic settings

Log in to the [Reduxi Configurator via the browser](#) (see [Point 4](#)).

- Click **+ Add device**.
- Enter the basic settings: device type **Energy meter**, type **Lovato Electric DMG series**, and a name of your choice.
- Press **Next**.

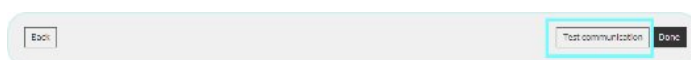
5.2 Communication settings

Select the communication channel and enter the device configuration:

PARAMETER	VALUE
Communication channel	The channel the meter is connected to
Modbus unit ID	Normally 1 . Use the node address set on the meter.
Serial parameters	Same values as on the meter (see Point 3)
Advanced settings	Enter and choose them as needed

5.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the Lovato Electric DMG 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 under **Devices – Lovato Electric DMG** in the Reduxi Configurator.

6.2 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): Check that your DMG model has an RS485 interface. Prepare the cable, the controller and a laptop or tablet.

Lovato DMG (Point 3): Set the Modbus parameters on the meter. The Modbus unit ID is normally 1.

meter	Lovato Electric DMG series	Energy
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Go live (Point 6): Check the last measurements and use the meter in your strategy.

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check the Modbus unit ID (normally <code>1</code>) and that the serial parameters in Reduxi match the meter. Check the cable. Check that your model has an RS485 interface.
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:



Lovato Electric DMG multimeters

Models and communication options of the DMG series



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