

Victron battery settings

Victron battery settings for Reduxi: ESS settings, Modbus TCP and unit ID on the GX device.

🔧 Victron GX device · Reduxi Controller

🌐 Modbus TCP (port 502)

📄 Modbus address: unit ID from Available services

📄 IN THIS ARTICLE

1. Technical documentation
2. Required equipment
3. Settings on the Victron GX device
 - ESS settings
 - Enable Modbus TCP and read the unit ID
4. Log in to the Reduxi web interface
 - Via the Reduxi app
 - Via a web browser
5. Add the Victron battery to Reduxi
 - Basic settings
 - Communication settings
 - Test communication
6. Check the readings
7. Summary
8. Common issues
9. Related articles

1 Technical documentation

Victron documents for the Modbus TCP connection and the ESS settings:

- [Modbus-TCP register list \(XLSX\)](#) – Register list. The Unit ID mapping tab shows which unit ID belongs to which device.
- [Data communication with Victron Energy products \(PDF\)](#) – Whitepaper with the Modbus-TCP section.
- [Modbus-TCP FAQ](#) – How to enable Modbus-TCP on a GX device.
- [Energy Storage System \(ESS\) manual](#) – Description of the ESS settings in the GX device.

2 Required equipment

You need:

- ☐ Victron GX device with the Victron battery system connected
- ☐ Reduxi Controller
- ☐ Network connection (Ethernet) between the GX device, the Reduxi Controller and your router
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

3 Settings on the Victron GX device

Make these settings in the menu of the GX device. The screenshots show the Remote Console of the GX device.

3.1 ESS settings

Open **Settings – ESS**. Under **Grid metering**, select **Inverter/Charger** and confirm.

The screenshots show these ESS values:

SETTING	VALUE
Mode	Optimized (without BatteryLife)
Grid metering	Inverter/Charger
Multiphase regulation	Individual phase
Minimum SOC (unless grid fails)	30%
Limit inverter power	Off
Grid setpoint	20 W

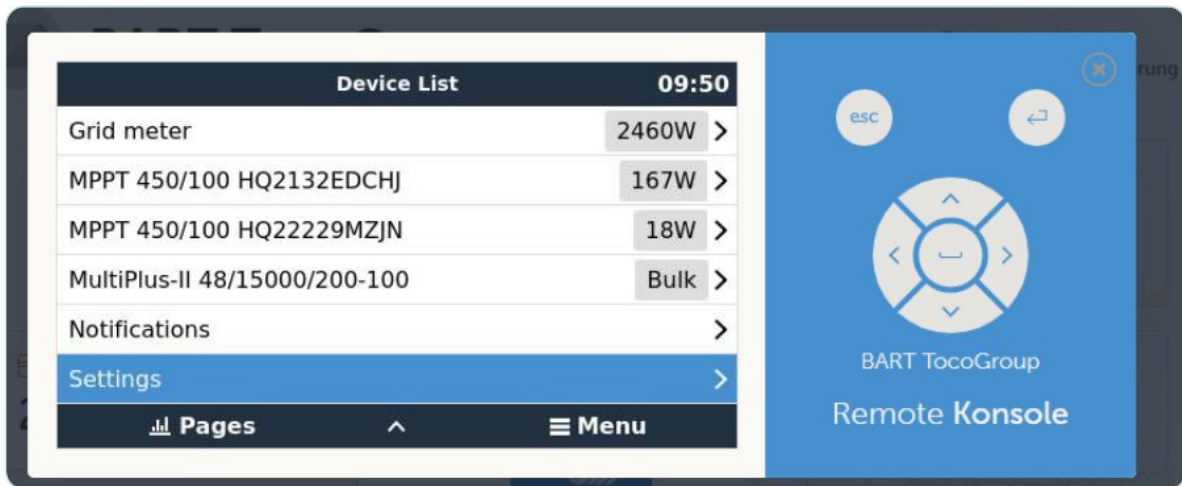


ESS settings: Settings – ESS, then Grid metering

Text description of this image

3.2 Enable Modbus TCP and read the unit ID

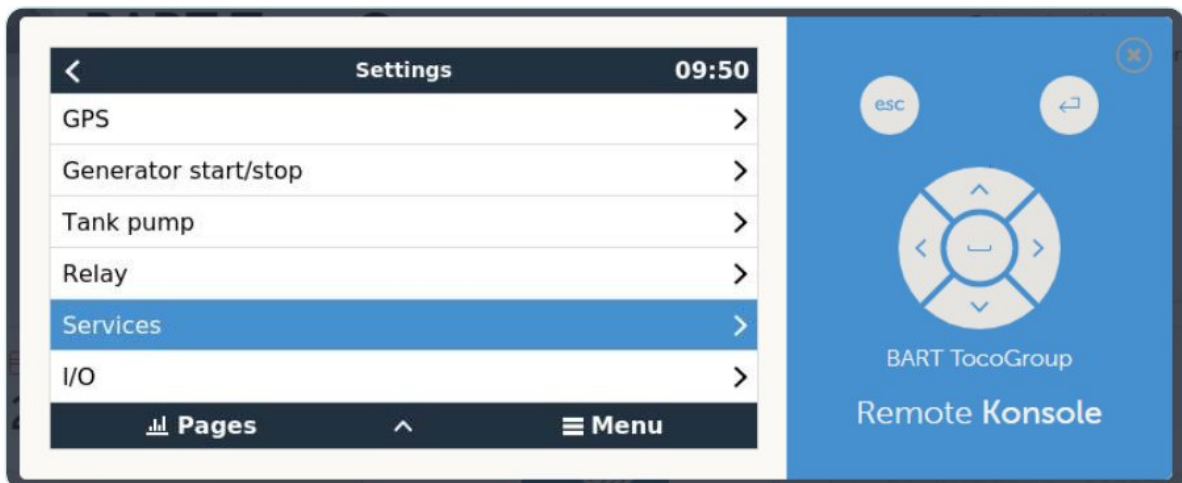
Open the **Device List** and select **Settings**.



Device List – Settings

Text description of this image

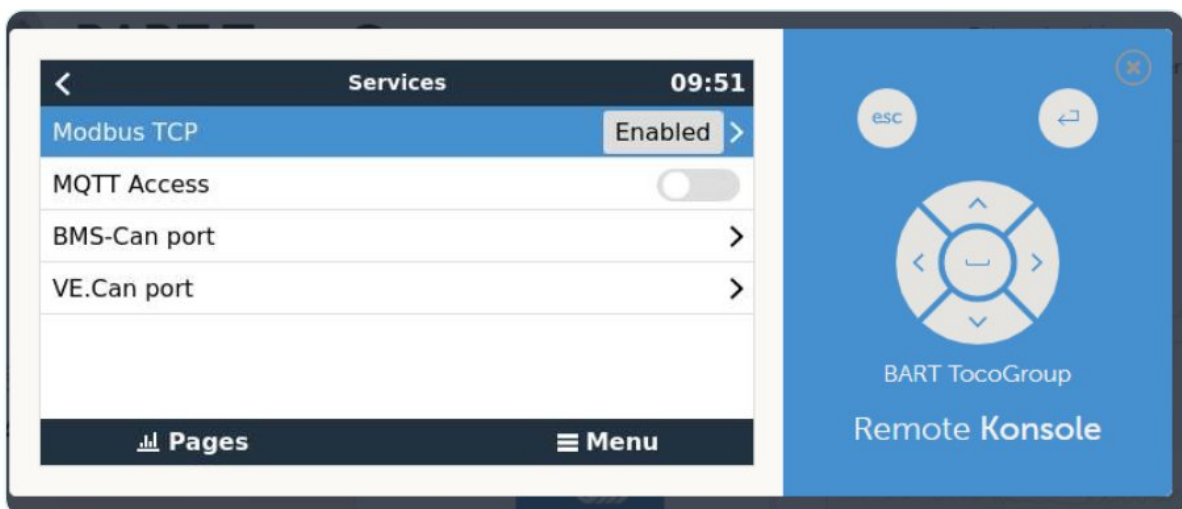
Select **Services**.



Settings – Services

Text description of this image

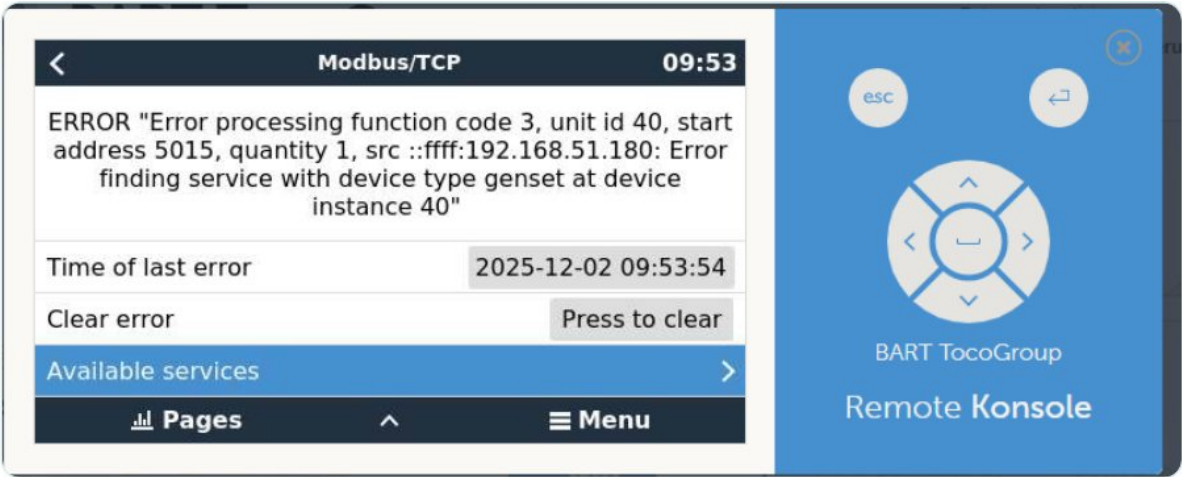
Set **Modbus TCP** to **Enabled**. Then open the **Modbus TCP** entry.



Services: Modbus TCP enabled

Text description of this image

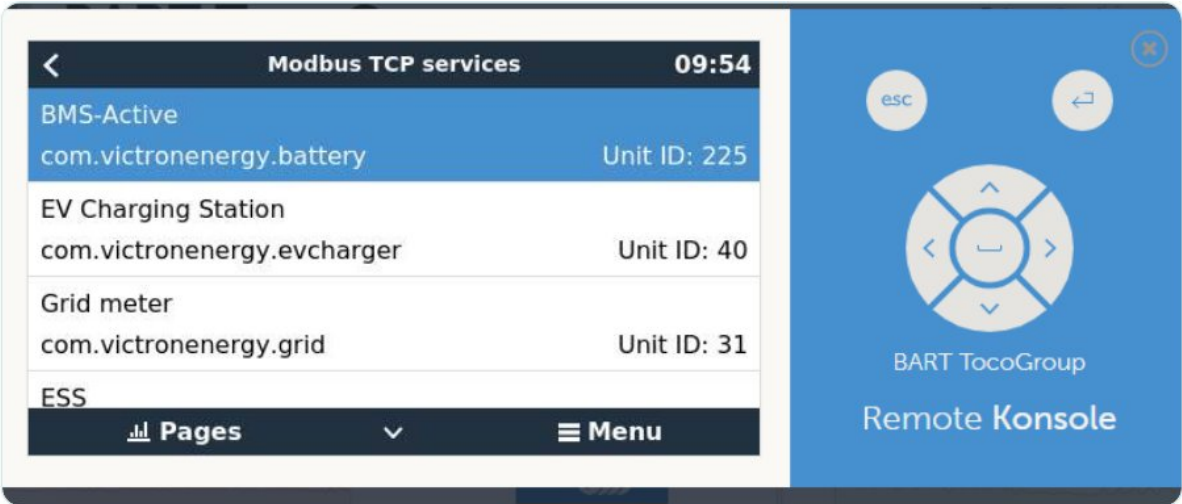
Select **Available services**.



Modbus/TCP page with **Available services**

Text description of this image

Under **Available services** you see the connected devices with their unit IDs. You need the unit ID of the battery later in Reduxi as the Modbus address.



Modbus TCP services: devices with their unit IDs

Text description of this image

SERVICE	UNIT ID IN THE SCREENSHOT
BMS-Active (com.victronenergy.battery)	225
EV Charging Station (com.victronenergy.evcharger)	40
Grid meter (com.victronenergy.grid)	31



Note

The unit IDs depend on your system. Read them on your GX device, do not copy the values above.

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

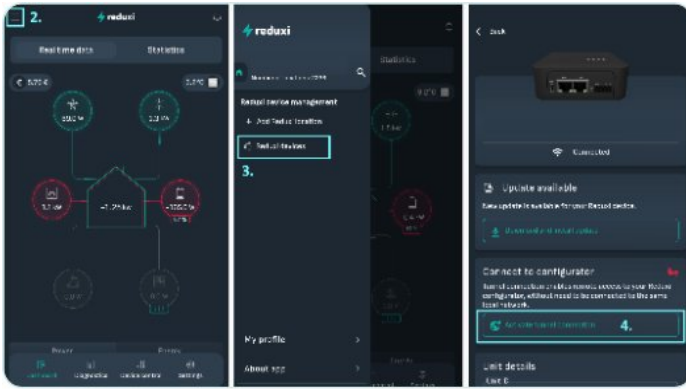
Activate the tunnel connection

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

4

Open the configurator

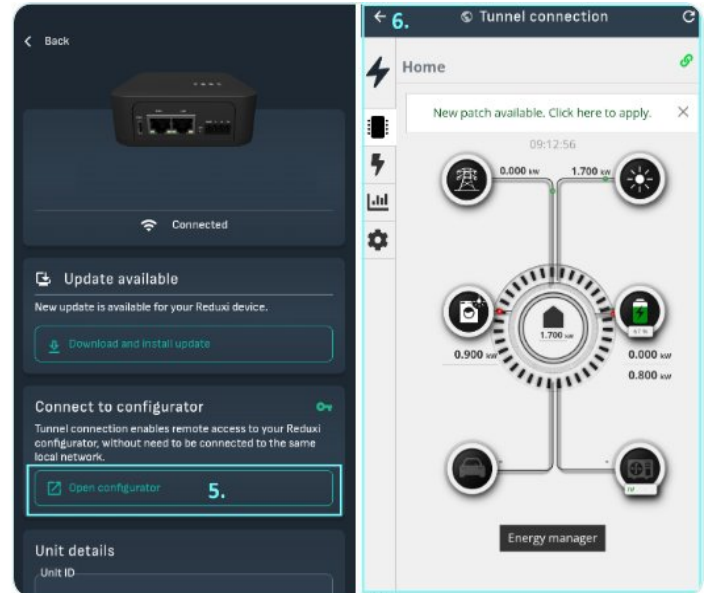
Tap **Open configurator**. The Reduxi web interface opens.



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 'Tunnel connection' screen. The screen displays a 'New patch available' notification and a 'Connect to configurator' section with a cyan box around the 'Open configurator' button labeled '6'.

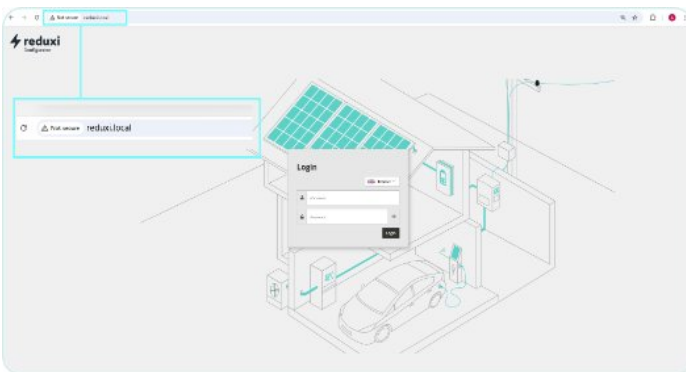
4.2 Via a web browser

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**.

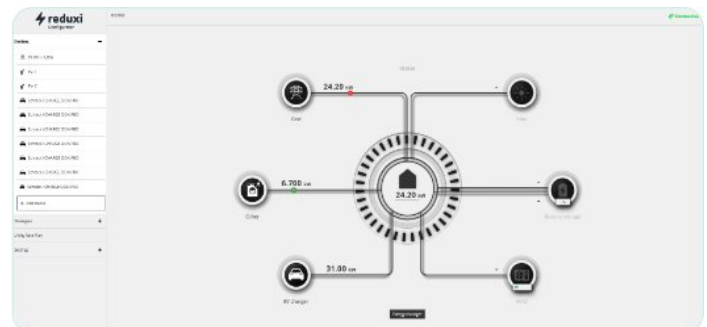
2 Log in

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 Victron battery to Reduxi

Use these steps to add the battery or to edit an existing device.

5.1 Basic settings

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

In the first step (basic settings), select the device type and type of the Victron battery and enter a name of your choice. Then press **Next**.

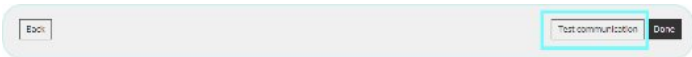
5.2 Communication settings

Enter the connection details of the GX device:

PARAMETER	VALUE
Connection	TCP/IP
IP	IP address of the Victron GX device
Port	502 (standard Modbus TCP port)
Modbus address	Unit ID of the battery, read under Available services (see Point 3)

5.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the Victron battery 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 battery under **Devices** in the Reduxi Configurator.

6.2 Enable control by Reduxi

For control by Reduxi, set the **control type** of the device to **AUTO** under **Devices** in the Reduxi Configurator. Only then do strategy commands affect the battery.

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

✓ Summary

Preparation (Points 1–2): Open the Victron documents and prepare the GX device, the Reduxi Controller and a laptop.

Victron GX device (Point 3): Set Grid metering to Inverter/Charger, enable Modbus TCP and read the unit ID of the battery.

Add to Reduxi (Points 4–5): Log in to the Reduxi web interface, add the device and enter IP, port 502 and unit ID.

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

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check that Modbus TCP is Enabled under Settings – Services on the GX device. Check the IP address of the GX device, port 502 and the unit ID under Available services .
The Modbus/TCP page on the GX device shows an error	The page shows the error and the time of the last error. Press Clear error and run the test again.
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:



Victron Modbus-TCP FAQ

How to enable Modbus-TCP on a Victron GX device.



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