

Reduxi meets M-Tec Hybrid Inverter

Save up to 70% on costs: connect the M-Tec Energy Butler GEN 3 hybrid inverter to the Reduxi Controller via Modbus TCP/IP.

🔧 M-Tec Energy Butler GEN 3 · Reduxi Controller

🌐 Modbus TCP/IP (Ethernet)

🔌 Port 502 · Modbus unit ID 255 (default)



M-Tec Energy Butler GEN 3

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1 Prepare the M-Tec Energy Butler GEN 3

1.1 Required equipment

- ☐ M-Tec Energy Butler GEN 3 with the LAN module
- ☐ Reduxi Controller
- ☐ Ethernet cables
- ☐ Router or switch
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

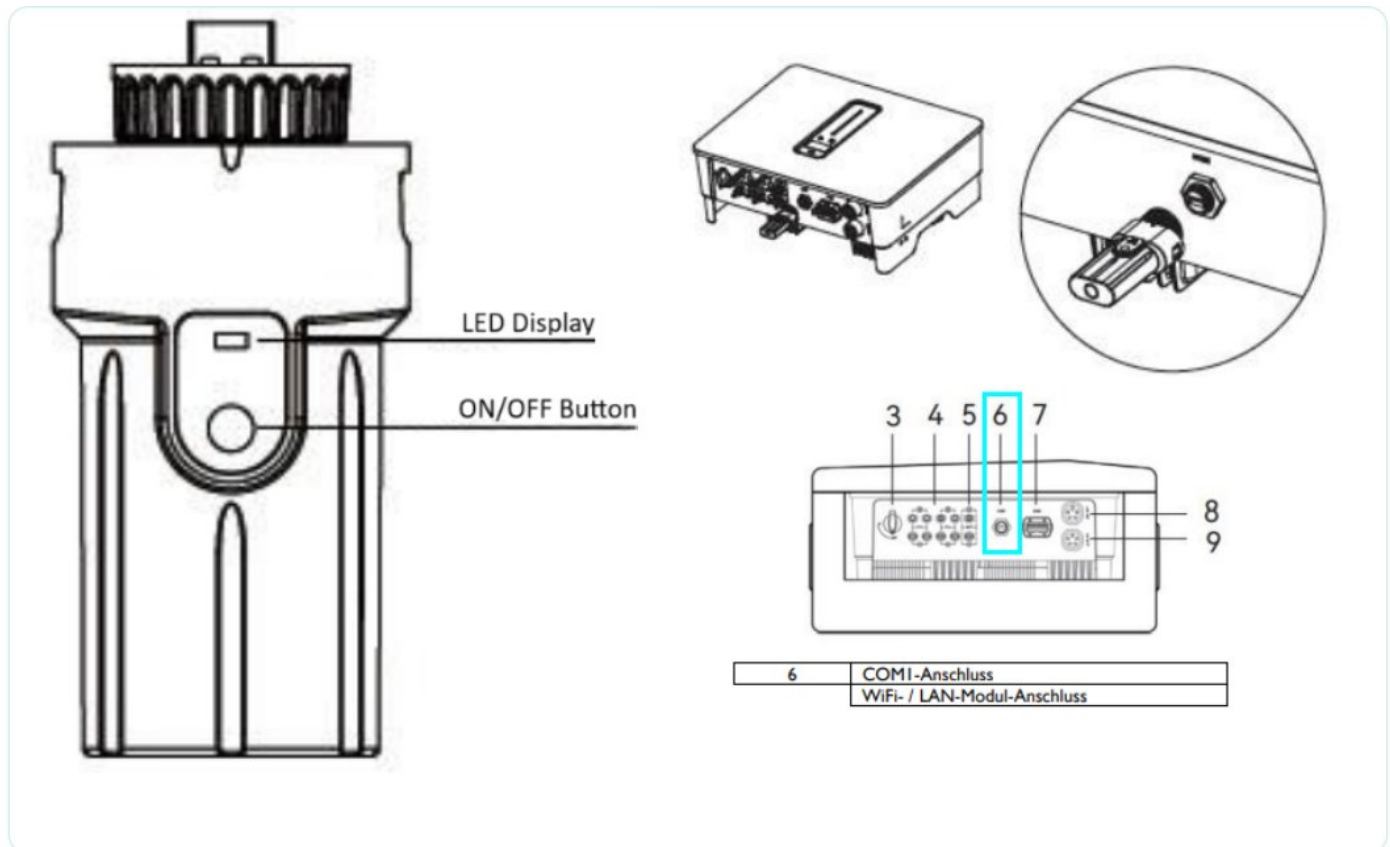
1.2 Install the latest firmware

With the latest firmware, the Modbus connection is enabled automatically. To update the firmware, contact M-Tec customer service: <https://www.mtec-systems.com/serviceanfragen/>

1.3 Connect the LAN module

The LAN module is included in the delivery of the Energy Butler. Connect it to **COM 1** on the inverter.

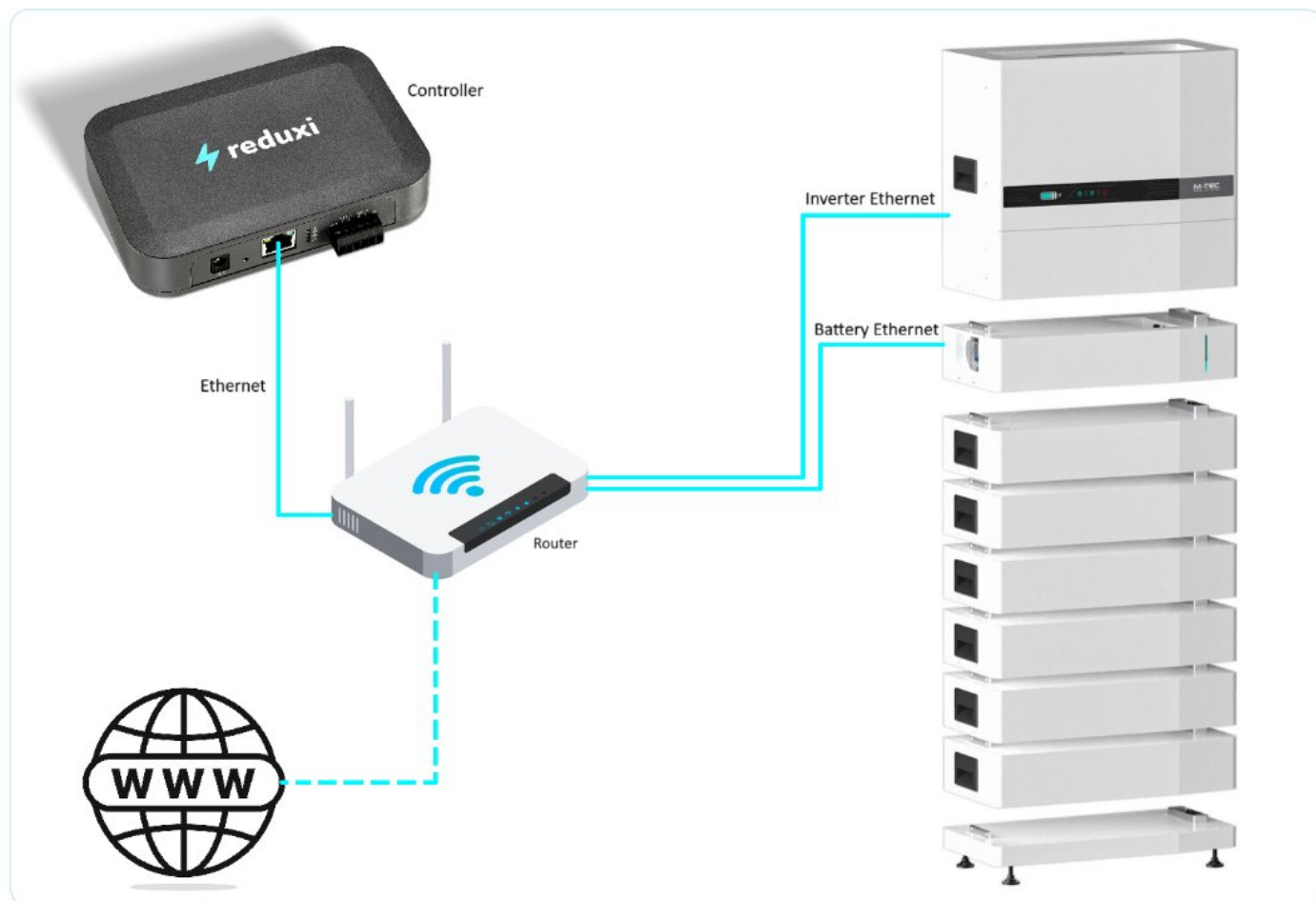
The diagram shows the module:



LAN module of the Energy Butler

2 Physical connection

The picture shows the entire connection from the Reduxi Controller to the inverter.

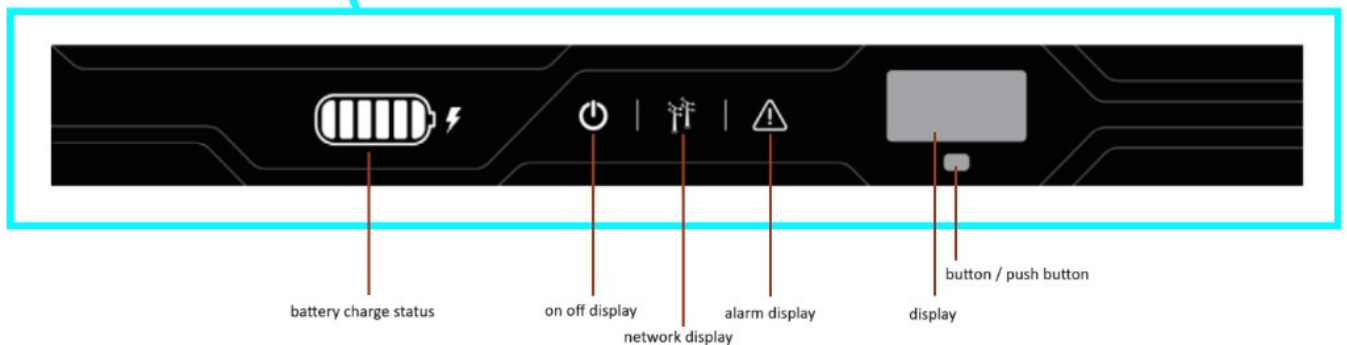


Connection from the Reduxi Controller to the M-Tec Energy Butler

3 Set the IP address on the M-Tec Energy Butler GEN 3

3.1 Display and menu button

You set the IP address locally on the display of the inverter.



Display and menu button



Important

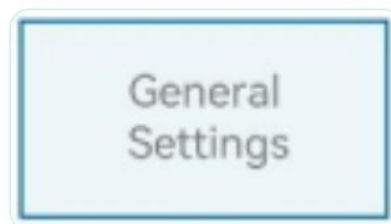
If the parameter is a number, press the button briefly to change the number. Hold it down to confirm the number and move to the next number. Wait 10 seconds: the inverter then saves your changes automatically.

3.2 Menu navigation

1

Open General Settings

Press the button once to activate the display. When **General Settings** appears, press the button for about 3 seconds to enter the submenu.



General Settings

2

Find DHCP Set

Press the button repeatedly until the **DHCP Set** menu appears. **DHCP On** is displayed by default.



DHCP Set ON

3

Switch DHCP off

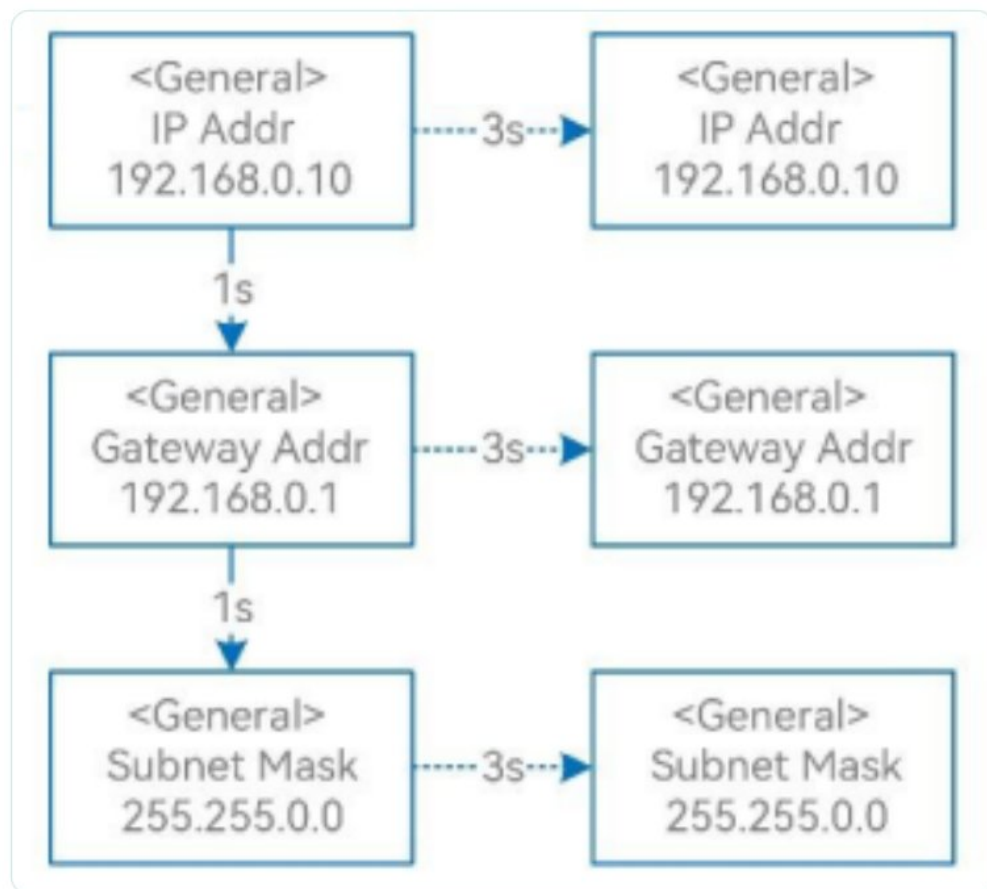
Press and hold the button for about 3 seconds. DHCP **On** changes to **OFF**.



DHCP Set OFF

4**Set the IP address**

Press the button briefly to change the IP settings. Set the address for the Energy Butler GEN 3 that matches your home network. Change the values with a short press. Confirm your entry with a press longer than 3 seconds.



Sequence for IP address, gateway address and subnet mask

5**Set gateway and subnet mask**

Repeat the process for the gateway address and the subnet mask.

6**Save**

Write down the values. Wait about 10 seconds until the inverter saves the settings and returns to the main menu.

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

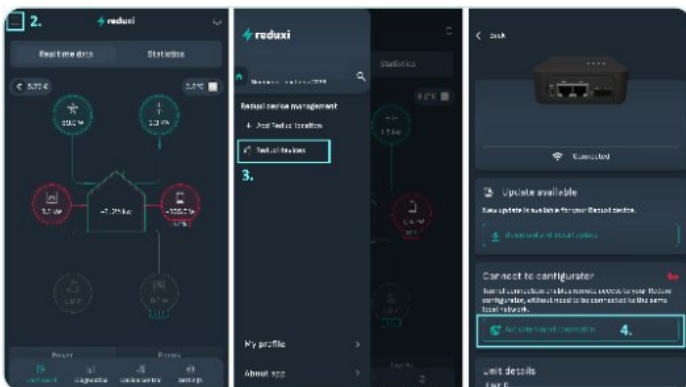
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

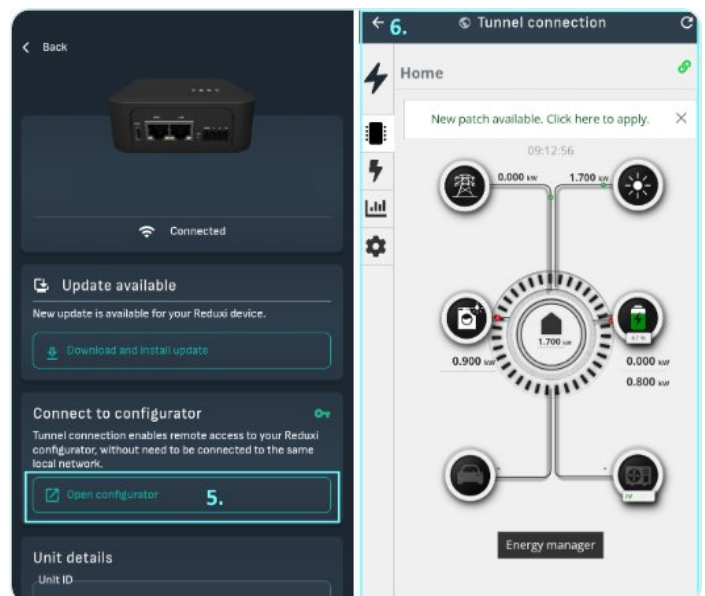
Switch on the tunnel connection and wait a moment until it is active.

4 Open the configurator

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



Activate the tunnel connection (step 3)



Open configurator (step 4)

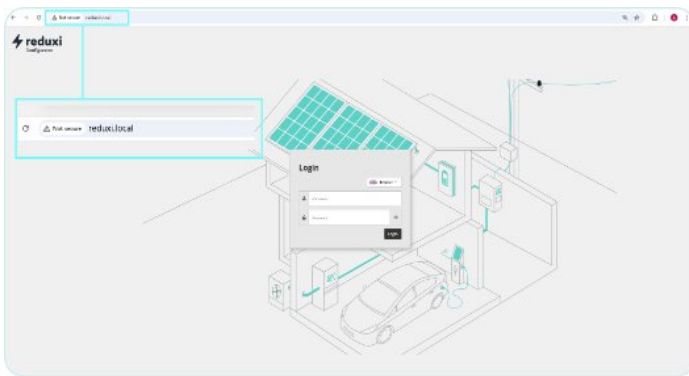
4.2 Via a web browser

1 Open the login page

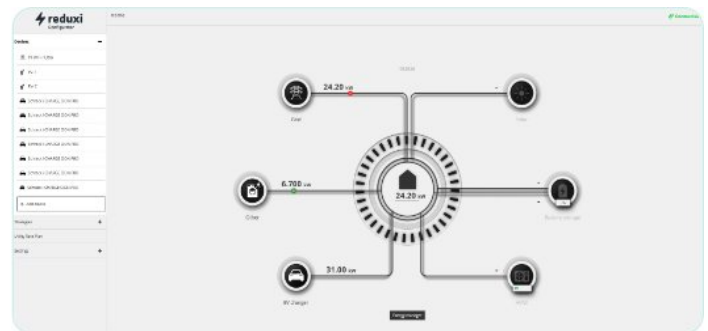
On a device in the same network, open a web browser and enter the controller's IP address or `http://reduxi.local`. You can find the controller's IP address in your router's device list or in the Reduxi app under **Reduxi devices**.

2 Log in

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



Reduxi Controller login screen



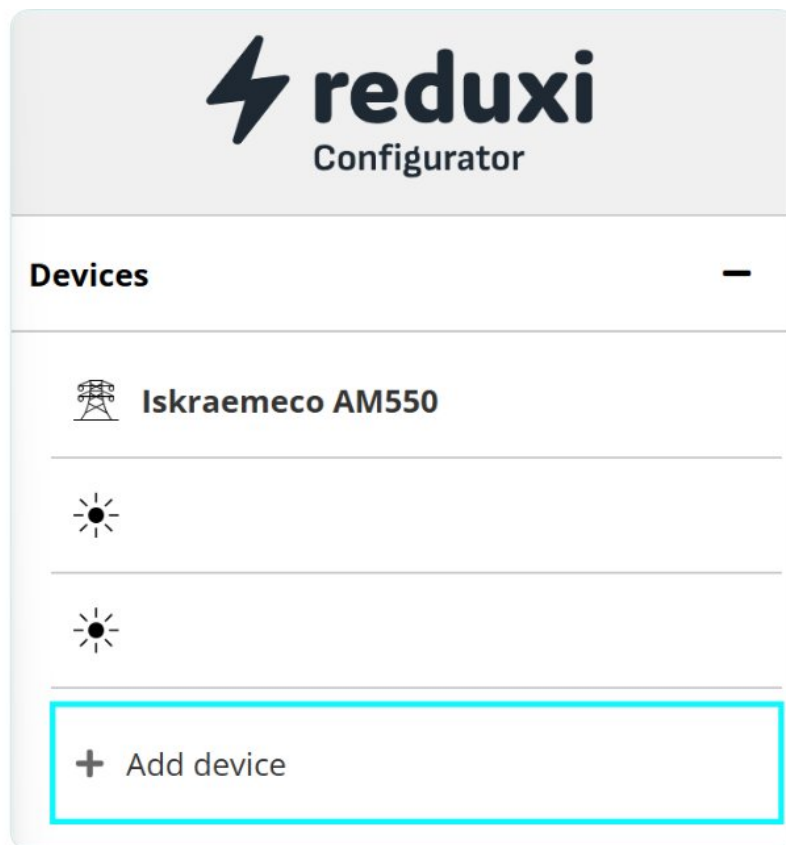
Controller web interface after login

5 Add the M-Tec Energy Butler GEN 3 to Reduxi

After you connect the Reduxi Controller and the M-Tec Energy Butler, register it as a new device.

5.1 Basic settings

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



The Add device button

In the first step, select the basic settings:

- Device type: **Hybrid Inverter**
- Type: **M-Tec Energy Butler GEN 3**
- Name: a name of your choice, for example **M-Tec Energy Butler GEN 3**

1

Basic settings

2

Communication channel

Basic settings

Device type *

Hybrid inverter

Type *

Name *

M-Tec Energy Butler GEN 3

Back

Next

Basic settings: device type, type and name

Click **Next**.

5.2 Communication settings

The second step sets up the communication channel for Modbus TCP/IP between the Reduxi Controller and the inverter:

PARAMETER	VALUE
Connection	TCP/IP
IP	The IP address of the M-Tec Energy Butler GEN 3 (see Point 3)
Port	502
Modbus unit ID	255 : the default value of M-Tec

1
Basic settings

2
Communication channel

Communication channel and device configuration

Connection *

TCP/IP

IP *

Port *

502

Modbus unit ID *

1

Back
Test communication Done

Communication settings

5.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the M-Tec Energy Butler GEN 3 once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.

Back
Test communication Done

The **Test communication** button

Communication channel and device configuration

Connection *

TCP/IP

IP *

192.168.20.243

Port *

502

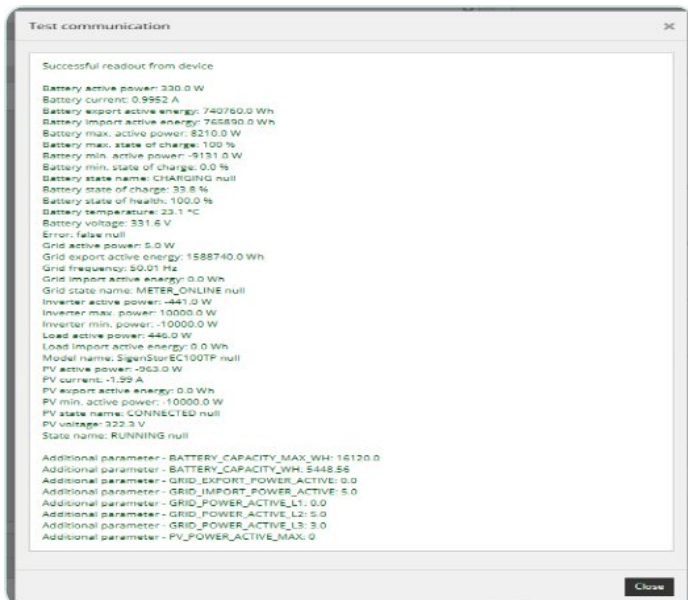
Modbus unit ID *

1

Back
Test communication Done

The **Done** button

Examples of the result for this device:



1. Test successful (example)



2. Test failed (example)

6 Check the readings

6.1 Last measurements

Check the measured values and the communication under **Devices – M-Tec Energy Butler GEN 3 – Last Measurement** in the Reduxi Configurator.

Last measurements				Without refreshing	
Control type					
Auto Manual					
14.03.2025 12:48:13					
PV					
PV active power	-1.0 kW	14.03.2025 12:48:01			
PV current	-1.98 A	14.03.2025 12:48:01			
PV voltage	327.63 V	14.03.2025 12:48:01			
PV export active energy	587.0 kWh	14.03.2025 12:48:01			
PV min. active power	-10.0 kW	14.03.2025 12:48:01			
PV export active power limit	kW	14.03.2025 12:48:01			
enumeration.PV_STATE_NAME	CONNECTED	14.03.2025 12:48:01			
Load					
Load active power	0.4 kW	14.03.2025 12:48:01			
Load import active energy	1,109.2 kWh	14.03.2025 12:48:01			
Battery					
Battery active power	0.4 kW	14.03.2025 12:48:01			
Battery current	1.09 A	14.03.2025 12:48:01			
Battery voltage	331.60 V	14.03.2025 12:48:01			
Battery state name	CHARGING	14.03.2025 12:48:01			
Battery state of charge	33.80 %	14.03.2025 12:48:01			
Battery min. state of charge	0.00 %	14.03.2025 12:48:01			
Battery max. state of charge	100.00 %	14.03.2025 12:48:01			
Battery import active energy	765.9 kWh	14.03.2025 12:48:01			
Battery export active energy	740.8 kWh	14.03.2025 12:48:01			
Battery min. active power	-9.1 kW	14.03.2025 12:48:01			
Battery max. active power	8.2 kW	14.03.2025 12:48:01			
Battery active power setpoint	1.0 kW	14.03.2025 12:48:01			
Inverter					
Inverter active power	-0.4 kW	14.03.2025 12:48:01			
Inverter max. active power	10.0 kW	14.03.2025 12:48:01			
Inverter min. active power	-10.0 kW	14.03.2025 12:48:01			
State name	RUNNING	14.03.2025 12:48:01			
Error	OFF	14.03.2025 12:48:01			
Grid					
Grid frequency	49.990 Hz	14.03.2025 12:48:01			
Grid active power	0.0 kW	14.03.2025 12:48:01			
Grid import active power limit	kW	14.03.2025 12:48:01			
Grid export active power limit	kW	14.03.2025 12:48:01			
enumeration.GRID_STATE_NAME	METER_ONLINE	14.03.2025 12:48:01			
Grid export active energy	1,588.7 kWh	14.03.2025 12:48:01			
Grid import active energy	0.0 kWh	14.03.2025 12:48:01			
Other					
Battery state of health	100.00 %	14.03.2025 12:48:01			
Battery temperature	23.10 °C	14.03.2025 12:48:01			
Model name	SigenStorEC100TP	14.03.2025 12:48:01			
Communication error	OFF	14.03.2025 12:48:01			
Control type	MANUAL	14.03.2025 12:48:01			
Mode name setpoint	SELF_CONSUMPTION	14.03.2025 12:48:01			

Last measurements of the inverter

6.2 Enable control by Reduxi

For advanced control, integrate the device into the optimization modes of the Reduxi system. Under **Devices – M-Tec Energy Butler GEN 3** in the Reduxi Configurator, set the **control type** to **AUTO**. Only then do strategy commands affect the battery.

To achieve maximum flexibility and energy cost reduction with dynamic prices and dynamic tariffs, define a strategy as described in [Strategies for Reduxi controller](#).

After you add the device, you can monitor and control it via [the Reduxi application](#).

Summary

Preparation (Points 1–2): Install the latest firmware. Connect the LAN module to COM 1. Connect the inverter and the Reduxi Controller to the router.

M-Tec Energy Butler GEN 3 (Point 3): Switch DHCP off on the display and set IP address, gateway address and subnet mask. Write the values down.

Add to Reduxi (Points 4–5): Log in to the Reduxi web interface, click + Add device, enter IP, port 502 and unit ID 255. Click Test communication, then Done.

Go live (Point 6): Check the last measurements. Set the control type to AUTO and define a strategy.

→ Common issues

ISSUE	SOLUTION
Modbus connection does not work	Install the latest firmware. It enables Modbus automatically. Contact M-Tec customer service for the update.
Display settings are not saved	Wait about 10 seconds after the last entry. The inverter then saves the settings.
Test communication fails	Check the IP address (Point 3), port 502 and the Modbus unit ID. The M-Tec default is 255.
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:



M-Tec customer service

Request the firmware update for the Energy Butler.



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