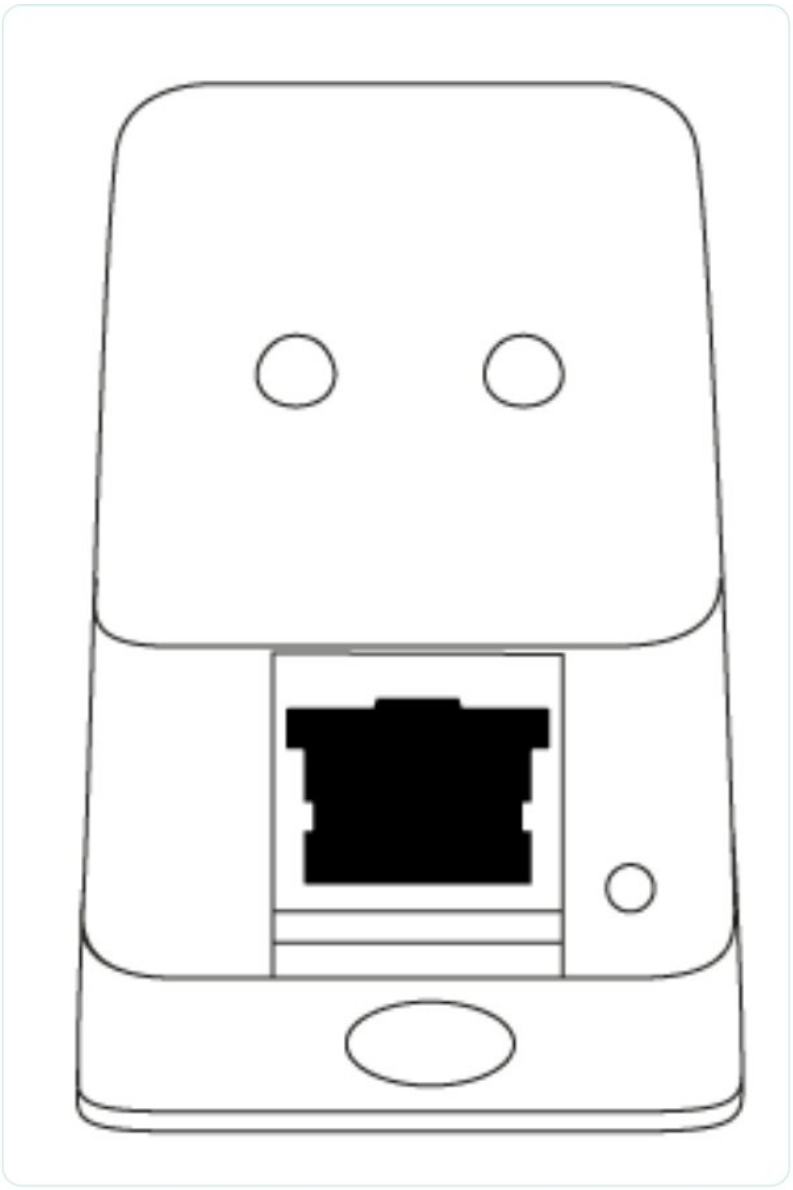
REDUXI CONTROLLER · KNOWLEDGE BASE

Reduxi P1 Ultra / Pro setup in Reduxi Configurator page

Connect your smart meter with a P1 port to the Reduxi Controller with the Reduxi Converter P1 Wi-Fi / Ultra.

- Reduxi Converter P1 Wi-Fi / Ultra
- Wi-Fi (TCP/IP) · P1 port, TTL level
- Powered by the smart meter via RJ12
- 35.4 x 70.4 x 22 mm · 30 g





Reduxi Converter P1 Wi-Fi

Text description of this image

📋 IN THIS ARTICLE

1. About the Reduxi Converter
   - → What Reduxi does
   - → Compatible devices
2. Connect the converter
   - → Connect the converter to the smart meter
   - → Connect the converter to your Wi-Fi network
3. Log in to the Reduxi web interface
   - → Via the Reduxi app
   - → Via a web browser
4. Add the converter to Reduxi
   - → Basic settings
   - → Communication settings
   - → Test communication
5. Specifications
   - → Dimensions
   - → Technical data
   - → Connection plugs
6. Troubleshooting
7. General instructions for use
8. Summary
9. Common issues
10. Related articles

1 About the Reduxi Converter

1.1 What Reduxi does

Reduxi lets you take control of energy costs and use electricity efficiently, for sustainable development. Main features:

- Peak power management
- Solar power plant production management
- Optimisation of electricity consumption

Accurate measurement and energy consumption analysis are the first steps towards energy reduction. The Reduxi Converter connects P1 meters to the Reduxi system via the Reduxi Controller.

1.2 Compatible devices

The Reduxi P1 Wi-Fi Converter is compatible with energy meters that follow the P1 standard. For example:

- Iskraemeco AM550

2 Connect the converter

First connect the Reduxi Converter P1 Wi-Fi / Ultra to a Wi-Fi network. Then connect it to the Reduxi Controller through the new TCP/IP connection. See also **Connect P1 WiFi / Ultra converter to grid meters and Reduxi Controller**.

2.1 Connect the converter to the smart meter

- Connect the smart meter to the Reduxi Converter with the RJ12 cable. Make sure the order of the wires in the RJ12 cable matches on both sides. A working cable is included in the package.
- The green LED on the converter starts to glow.

2.2 Connect the converter to your Wi-Fi network

- Open the Wi-Fi networks on your phone or computer and connect to the network named **P1WIFI**.



*Connect to the **P1WIFI** network*

Text description of this image

- If no window opens automatically, open your browser and go to **http://p1wifi.local**.
- Log in with user name `admin` and password `admin`, or as printed on the label.
- Connect the converter to your local Wi-Fi network in the wireless network settings. We recommend a static IP address.
- Click **Save**.
- Connect your phone or computer to the same local Wi-Fi network as the converter.

3 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 reduxi.local

3.1 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

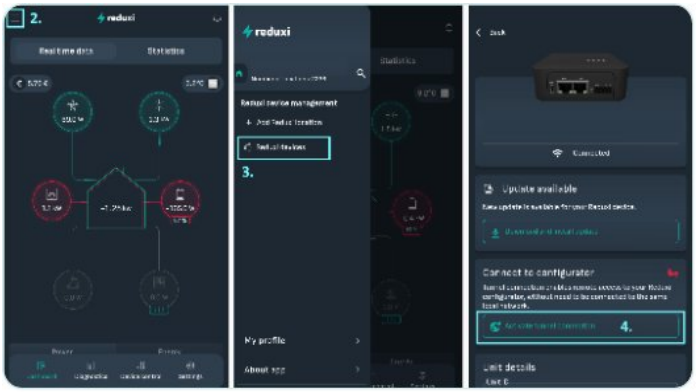
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

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

4 Open the configurator

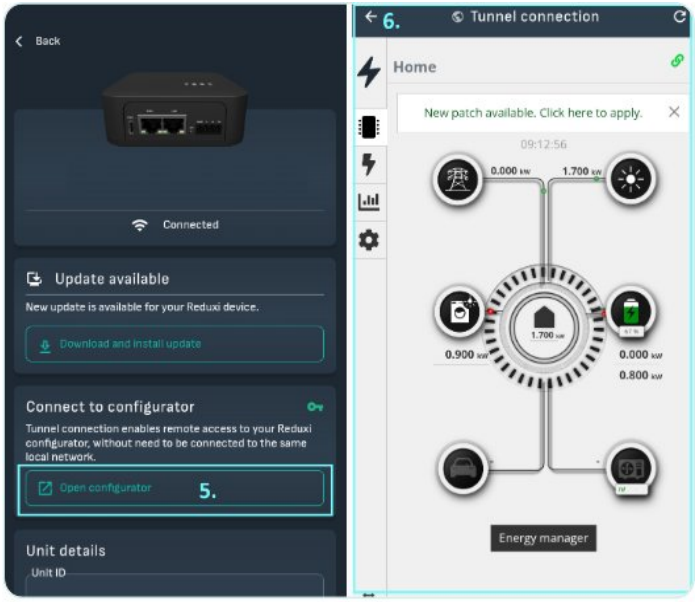
Tap **Open configurator**. The Reduxi web interface opens.



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)

2. Text description of this image

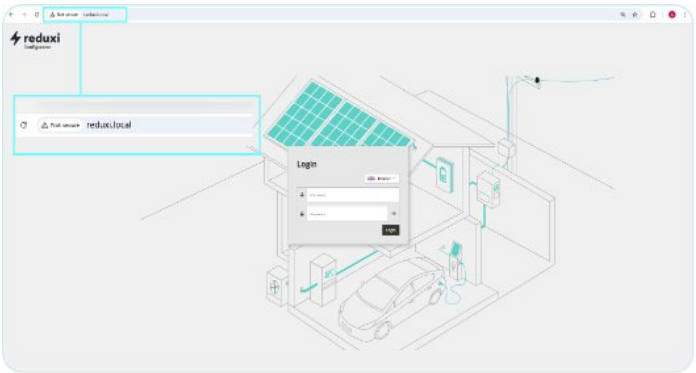
3.2 Via a web browser

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**.

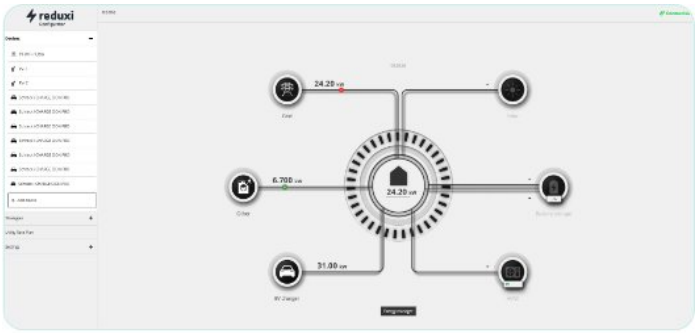
2 Log in

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



Reduxi Controller login screen

Text description of this image



Controller web interface after login

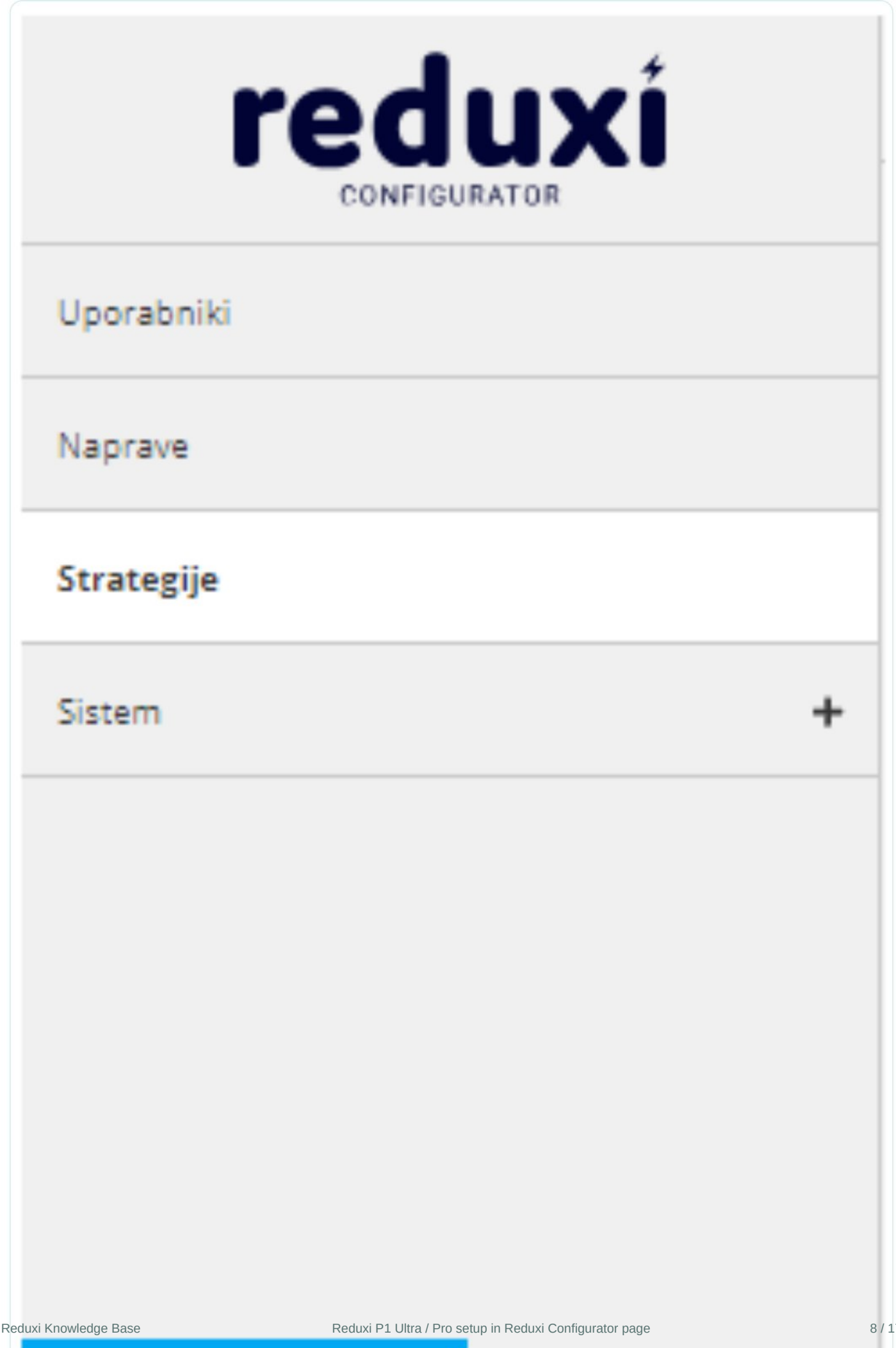
2. Text description of this image

Screenshot of the Reduxi Configurator web interface

4 Add the converter to Reduxi

4.1 Basic settings

Log in to the Reduxi Controller (see **Point 3**) and select **Add device**.


reduxi
CONFIGURATOR
Uporabniki
Naprave
Strategije
Sistem

Select **Energy meter** and the type of smart meter with a P1 port that you want to add, for example Iskraemeco AM550. Leave the other fields at their defaults. Example:

- Device type: `Energy meter`
- Type: `Iskraemeco AM550`
- Category: `Grid`
- Name: a name of your choice

> ⚠ **Note**
> Some energy meters are not compatible with the P1 protocol.



Basic settings: device type, type, category and name

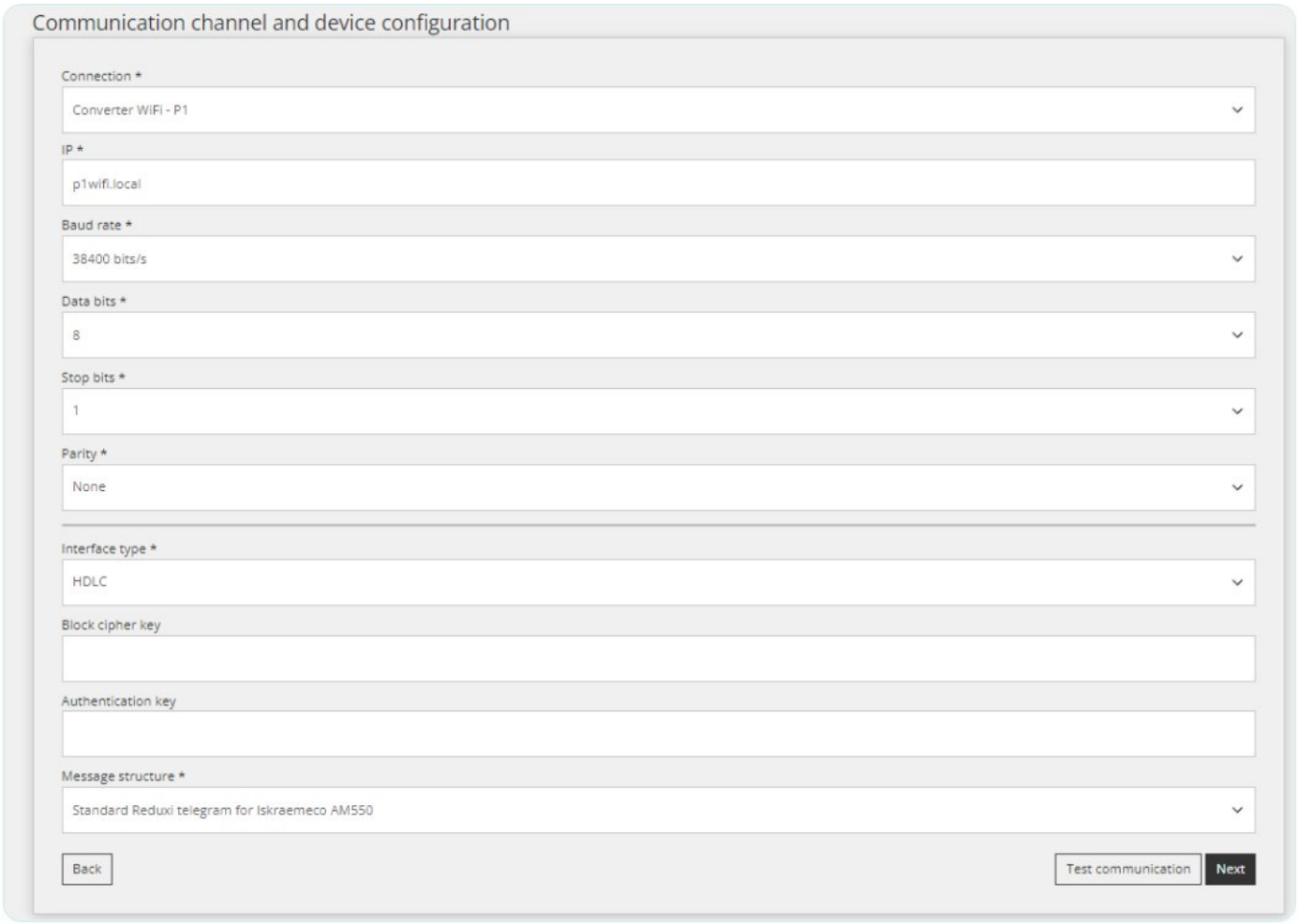
Text description of this image

4.2 Communication settings

In the next screen, enter the connection details:

- Connection type: `Converter WiFi - P1`
- Enter the IP address of the Reduxi Converter P1 Wi-Fi / Ultra or type `p1wifi.local`.

> ⚠ **Message structure**
> The last parameter, **Message structure**, can differ depending on where your meter is located (for example in another country). Change it accordingly. Leave the other parameters at their defaults.



Communication settings

Text description of this image

4.3 Test communication

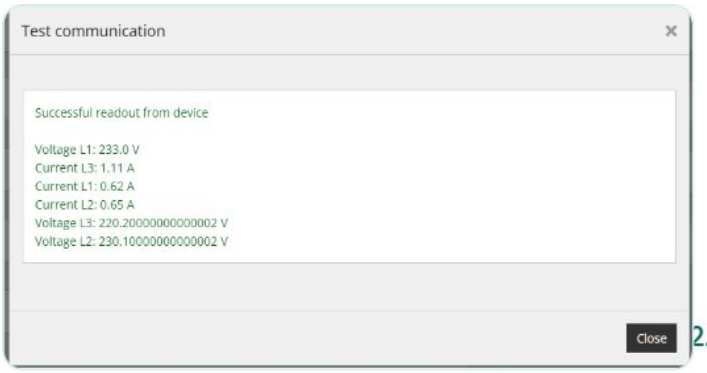
Click **Test communication** at the bottom, right after you have entered all communication channel fields.



*The **Test communication** button*

Text description of this image

The test returns one of two results:



1. Communication works properly

Text description of this image



2. Unable to communicate with the device

2. Text description of this image

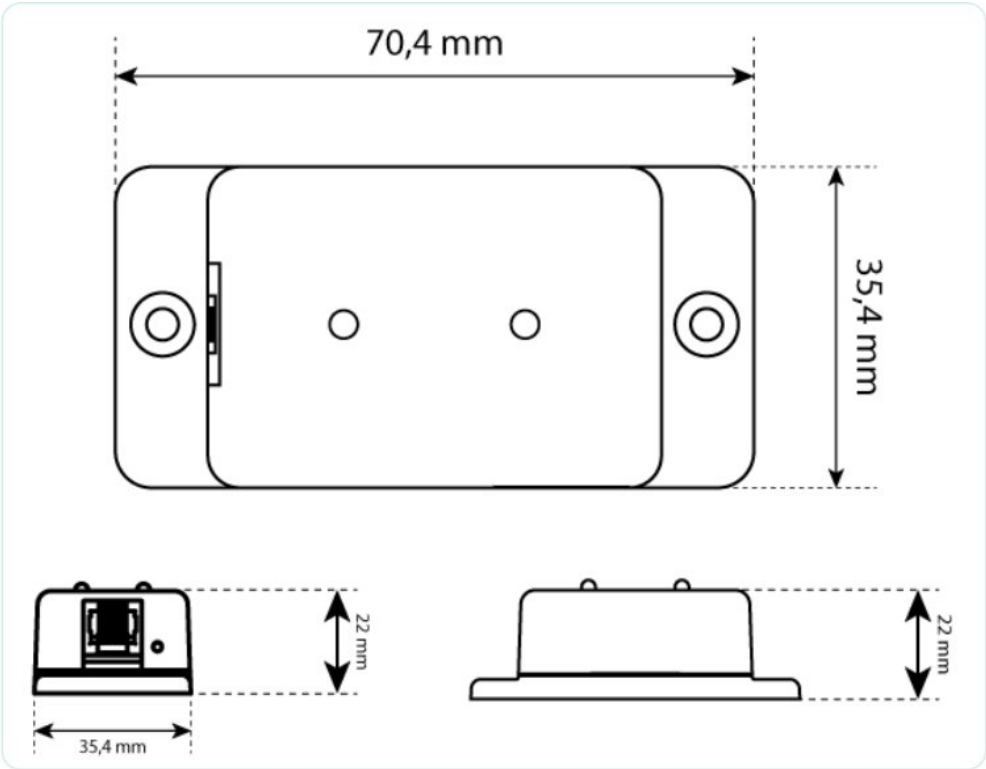
Screenshot of a dialog titled Test communication with a close X at the top right. In the body a single text box with red text: Unable to communicate with device. At

- If communication works, select **Done**. The device is added.
- If communication does not work, see **Point 6**.

For software configuration and installation, find the latest documentation at **support.reduxi.eu**.

5 Specifications

5.1 Dimensions



Dimensions of the converter

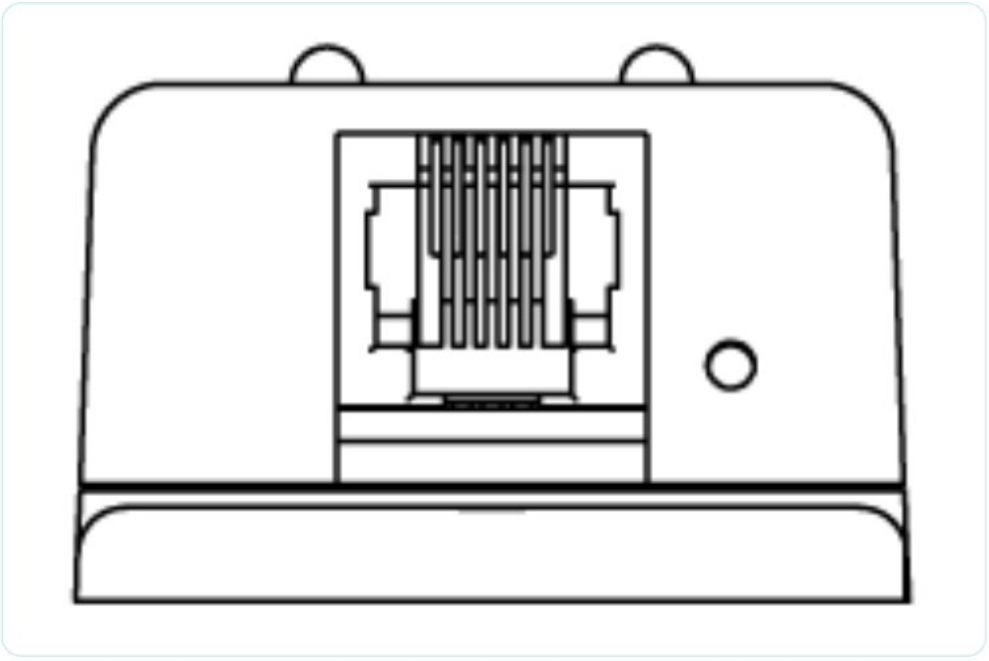
Text description of this image

PARAMETER	VALUE
Housing	Table housing that can be attached
Length	35.4 mm
Width	70.4 mm
Height	22 mm
Protection	<IP20
Weight	30 g

5.2 Technical data

GROUP	PARAMETER	VALUE
Power supply	Power supply	Smart meter
Pins	Smart meter	RJ12
Connectivity	Wi-Fi	
Connectivity	Smart meter	P1 port TTL level
Others	Operating temperature range	From 0°C to +40°C
Others	Storage temperature range	From -10°C to +70°C
Others	Relative humidity during operation	< 95% (does not condense)
Others	Protection	< IP20

5.3 Connection plugs



Communication plug RJ12 (marked with number 2)

Text description of this image

PIN	FUNCTION
1	+5V DC power supply
2	Data line demand – output
3	Data GND
4	NC – not connected
5	Data line – input
6	GND power supply

- Communication via P1 output
- Voltage level: 0 V – 5 V

LED indicator lights



LED indicators

Text description of this image

- **Green LED**: The power supply is active.
- **Purple LED blinking**: The device is connected to your home Wi-Fi network and data is transferred.
- **Blue LED blinking**: The device is connected to your home Wi-Fi network and NO data is transferred.
- **Red LED ON**: The device is NOT connected to your home Wi-Fi network and data is transferred.

6 Troubleshooting

If you have problems, perform a factory reset and start from a clean state. A factory reset is needed when the converter is connected to another energy meter or to another location.

1. **Power the converter**

   Connect the converter to the power supply. The power comes from the meter or from an external power supply.

2. **Reset**

   Press and hold the reset button for 10 seconds until the red LED starts.

> **Note**
> If the converter cannot be connected to the cloud web application, remove it from the cloud web application first.

7 General instructions for use

- **By using this device you accept Privacy policy and Terms and conditions.**
- **Read and retain** these instructions for future reference. Adhere to all warnings and guidelines.
- **Placement**: Ensure the product is placed on a stable, non-vibrating surface.
- **Unpacking**: Remove all packaging materials before connecting the product to the power supply.
- **Ventilation**: Keep the ventilation slots unobstructed. Do not place items on the product.
- **Moisture and liquids**: Protect the product from exposure to liquids, rain, or moisture.
- **Cleaning**: Always unplug the product before cleaning. Use only a soft, dry cloth. Avoid liquid or spray cleaners.
- **Openings**: Do not insert objects into any openings.
- **Repairs and modifications**: Do not attempt to open or repair the product yourself, as this will void your warranty. Only qualified service technicians should perform repairs.
- **Relocation**: Disconnect the product from the power supply before moving it.
- **Labels**: Keep all original labels intact and do not remove them from the product.
- **Heat sources**: Avoid installing the product near heat sources such as radiators, heaters, or other appliances that generate heat.
- **Power cable**: Install the power cable securely and ensure it is not a tripping hazard or exposed to potential damage from objects that could pinch or twist it.
- **Accessories**: Use only accessories or additional equipment recommended by the manufacturer.
- **Unplugging**: Disconnect the product from the power source during electrical storms or if it will not be used for an extended period.
- **Voltage requirements**: Connect the product only to a power outlet that matches the voltage requirements specified in these instructions.
- **Power access**: Ensure that the power input on the device is always accessible and functional.
- **Electrical load**: Do not overload electrical sockets, extension cords, or circuit breaker panels.

Producer

Name: AMIBIT d.o.o.
Address: Šaleška 2 a, 3320 Velenje
Identification Number: 6930808000
TAX ID: SI51315831
Email: info@reduxi.eu
Phone: +386 (0)3 777 01 40

Document

Purpose: Reduxi Converter P1 WiFi
Version: V1.0 12.2022

Copyright

© 2022 AMIBIT d.o.o.

All rights reserved. No part of this document may be reproduced, stored on a storage and retrieval system or in any other form, electronic, electrostatic, magnetic tape, photocopying or otherwise without the prior written permission of AMIBIT d.o.o.

✓ Summary

Preparation (Points 1–2): Connect the converter to the smart meter with the RJ12 cable. Then connect it to your local Wi-Fi network.

Log in (Point 3): Log in to the Reduxi Controller in the Reduxi Configurator.

Add to Reduxi (Point 4): Add the smart meter as an energy meter with connection type Converter WiFi - P1. Test communication, then select Done.

Reference (Points 5–7): Specifications, troubleshooting with factory reset, and general instructions for use.

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check and experiment with the Message structure. Check that the converter is connected to the network: open p1wifi.local or the IP address you configured in your browser. Check all steps in this guide. Ask your DSO to configure the meter so that it reports measurements regularly.
Converter is not connected to the Wi-Fi network	Check the LED: red LED on means the device is not connected to your home Wi-Fi network. Repeat the Wi-Fi settings in Point 2.
Converter was used with another meter or at another location	Perform a factory reset: hold the reset button for 10 seconds until the red LED starts.
Meter cannot be added	Some energy meters are not compatible with the P1 protocol.

Related articles

Matching guides from the Reduxi knowledge base:

Connect P1 WiFi / Ultra converter to grid meters and Reduxi Controller

Physical connection of the converter to Iskraemeco AM550 and Sagemcom T211 and connection options to the Reduxi Controller.

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