

How to connect Iskra iMC784 power quality analyzer with Reduxi controller

Connect your Iskra Power Quality Analyzer MC784 / iMC784 to the Reduxi Controller.



🔌 Iskra MC784 / iMC784 · Reduxi Controller

🌐 Modbus  Modbus unit ID: normally 1



Iskra iMC784 power quality analyzer

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1 Technical documentation

Instructions to connect and configure the analyzer are on the Iskra manufacturer web page. Manufacturer documents of the Iskra MC784 / iMC784:

- [Advanced Power Quality Analyser MC784 / iMC784](#) – Product page with description and documents.
- [Data sheet iMC784 / MC784 \(PDF\)](#) – Communication, power supply, mounting and terminals.
- [Users manual iMC784 / MC784 \(PDF\)](#) – Installation and configuration.
- [Leaflet iMC784 \(PDF\)](#) – Product overview.

2 Required equipment

- ☐ Iskra MC784 or iMC784 power quality analyzer, installed by a qualified electrician
- ☐ Cable for the communication interface: RS485 cable or Ethernet cable
- ☐ Reduxi Controller
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

3 Connect and configure the analyzer

Find the instructions to connect and configure the analyzer in the documents of [Point 1](#).

3.1 Interfaces and terminals

The MC784 / iMC784 is a Class A power quality analyzer according to IEC 61000-4-30 Ed. 3. It has these communication interfaces:

INTERFACE	DESCRIPTION
COM1	Ethernet (RJ-45, 10/100BASE-TX) and USB 2.0 Type B
COM2	RS232 or RS485
RS485 on I/O module C	Terminal 54 (A) and terminal 55 (B)

The protocols are Modbus RTU, Modbus TCP, DNP3 and MQTT. IEC 61850 is optional.

CONNECTION	TERMINALS
Power supply	L on 13 , N on 14 , protective earth on 12 . Always connect the earth.
Voltage inputs	UL1 on 2 , UL2 on 5 , UL3 on 8 , UN on 11
Current inputs	IL1 on 1 / 3 , IL2 on 4 / 6 , IL3 on 7 / 9 , neutral current on 26 / 27



Power supply

AC: 100 to 240 V (-20 %/+15 %), 40 to 65 Hz. DC: 100 to 250 V (+20 %). The analyzer is mounted in a panel (cut-out 137 x 137 mm).

3.2 Communication settings on the analyzer

Configure the communication settings as described in the users manual (see [Point 1](#)). The manufacturer provides the free Miqen configuration software for this.

You need the Modbus unit ID of the analyzer in the Reduxi Configurator. Normally, 1 is used.

4 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 reduxि.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

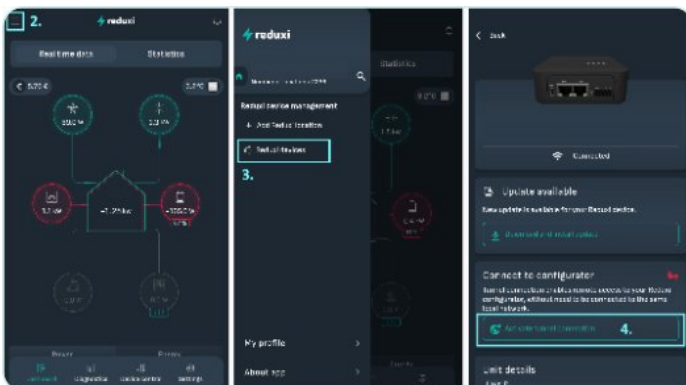
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

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

4 Open the configurator

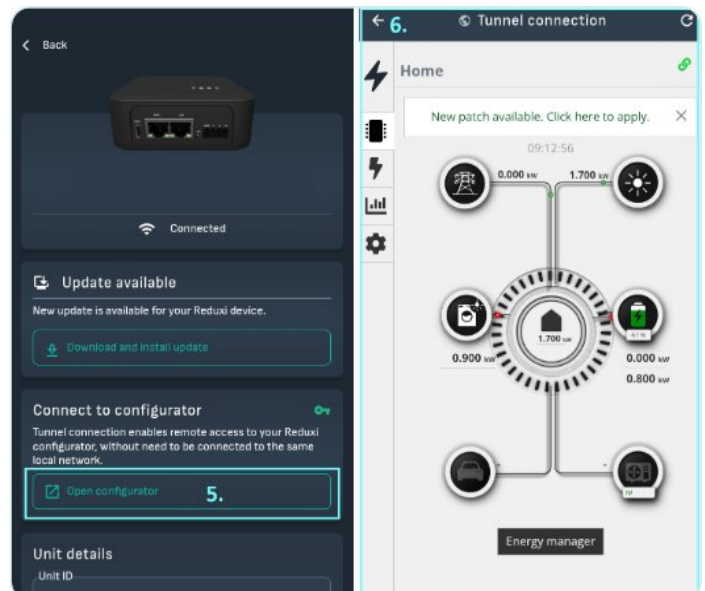
Tap **Open configurator**. The Reduxi web interface opens.



Activate the tunnel connection (step 3)

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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

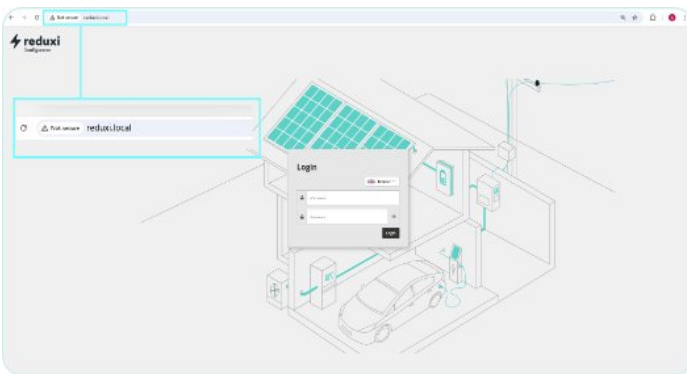
4.2 Via a web browser

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**.

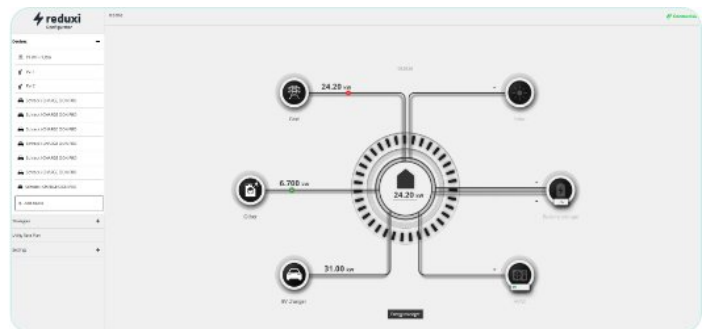
2 Log in

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



Reduxi Controller login screen

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Controller web interface after login

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Screenshot of the Reduxi Configurator web interface

5 Add the analyzer to Reduxi

Use these steps to add a new analyzer or to edit an existing one.



Read only

In the List of supported devices, the Iskra Power Quality Analyzer MC784 / iMC 784 is listed with the protocol Modbus and with read access.

5.1 Basic settings

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

In the first step, enter the basic settings of the device. Then click **Next**.

5.2 Communication settings

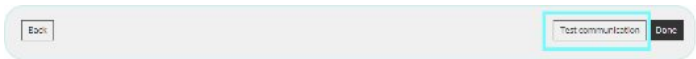
Select the communication channel. Then enter the device configuration:

PARAMETER	VALUE
Modbus unit ID	Normally 1

Then enter and choose the advanced settings. Serial parameters, if requested, must match the settings of the analyzer (see [Point 3](#)).

5.3 Test communication

Click **Test communication** at the bottom of the wizard. It reads the Iskra MC784 / iMC784 once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.



The **Test communication** button

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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** in the Reduxi Configurator. Reduxi only reads the analyzer.

✓ Summary

- Preparation (Points 1–2):** Read the Iskra documents and prepare the equipment.
- Iskra analyzer (Point 3):** Connect the analyzer via RS485 or Ethernet. Set the communication parameters and note the Modbus unit ID.
- Add to Reduxi (Points 4–5):** Log in to the Reduxi Configurator, add the analyzer with its Modbus unit ID and test the communication.
- Go live (Point 6):** Check the readings. Reduxi reads the analyzer.

→ Common issues

ISSUE	SOLUTION
Test communication fails	Check that the Modbus unit ID in Reduxi equals the Modbus address set on the analyzer. Check that the serial parameters match.
The analyzer does not respond on the RS485 bus	Check the RS485 terminals 54 (A) and 55 (B) and the communication settings on the analyzer.
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:



Iskra MC784 / iMC784 product page

Specifications, data sheet and users manual.



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