

How to connect Iskraemeco MT880 energy meter with Reduxi controller

Connect the Iskraemeco MT880 energy meter to the Reduxi Controller via RS485 and add it in the Reduxi Configurator.



🔧 Iskraemeco MT880 · Reduxi Controller

🔌 RS485 · module CM-v-3

📡 HDLC address · logical device ID 1 · client address 1



Iskraemeco MT880 energy meter

Text description of this image

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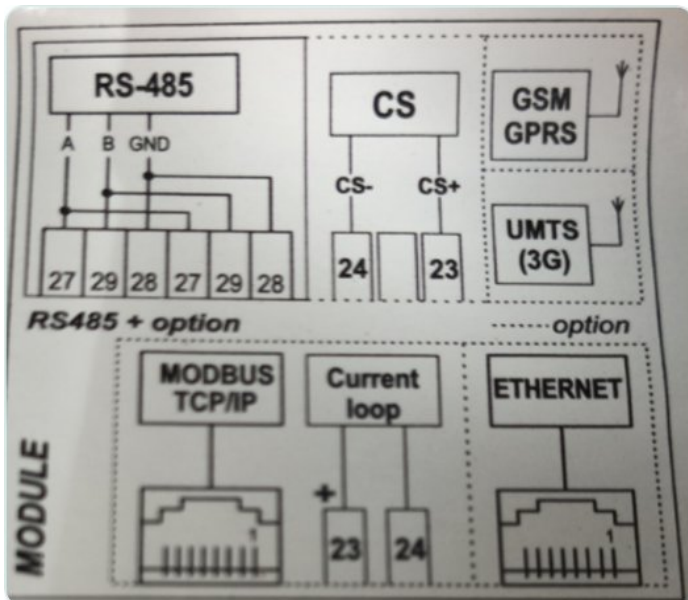
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1 Connect the energy meter to the Reduxi Controller

1.1 Communication module CM-v-3

Connect RS485 to the module CM-v-3. The module identification differs based on the optional add-on that the energy meter supports (RS485, CS, GSM-GPRS, UMTS (3G), Modbus TCP/IP, current loop, Ethernet).



Terminal layout of the optional modules



Energy meter with the CM-v-3 module

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1.2 Option 1: connect the pins on the optional card

Connect the pins of the optional card. In the energy meter settings of the Iskraemeco meter, use **Channel 3**.

PIN ON THE OPTIONAL CARD	SIGNAL
27	A
29	B
28	GND

1.3 Option 2: connect the pins directly on the energy meter

Connect the pins directly on the energy meter. In the energy meter settings of the Iskraemeco meter, use **Channel 1**. Elektro Ljubljana informed us that this port is always active and needs no additional configuration.



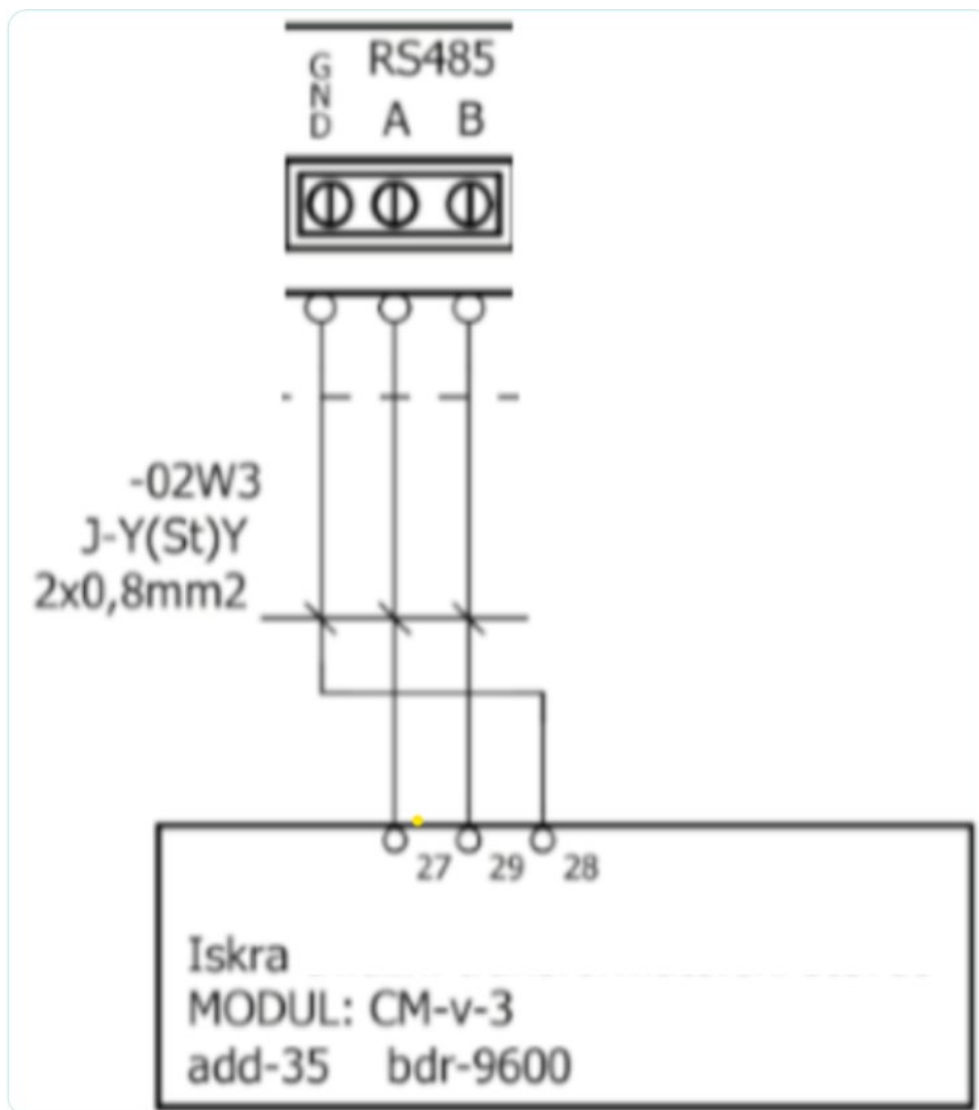
Terminal block on the energy meter

Text description of this image

1.4 Connect the Iskraemeco MT880 to RS485

Connect the RS485 terminals of the Reduxi Controller to the energy meter:

REDUXI CONTROLLER	ISKRAEMECO MT880
PIN A	PIN 27
PIN B	PIN 29
PIN GND	PIN 28



Wiring diagram RS485

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2 Get the serial number of the energy meter

Read the serial number from the energy meter. The red square in the picture shows the last four digits of the serial number. The rest of the serial number is hidden for security reasons. On your meter, read the whole serial number.



Serial number on the energy meter

Text description of this image

3 Get the physical device address (HDLC address)

3.1 Address from the serial number

The address is the last two digits of the serial number of the energy meter.

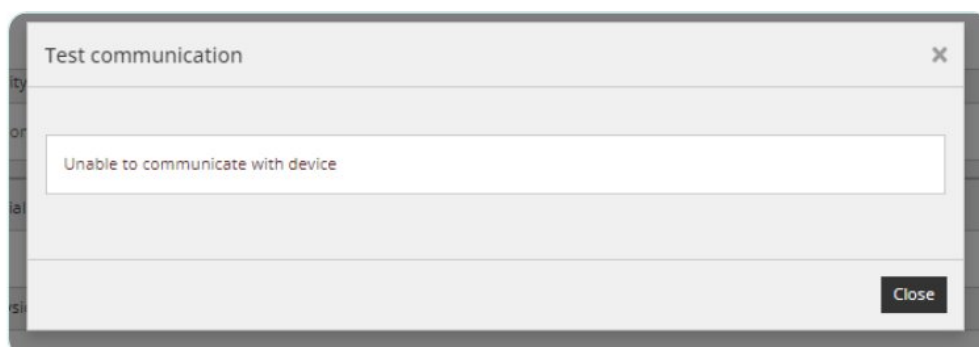


Last digits of the serial number

Text description of this image

Example: if the last two digits of the serial number are 59, the address is **59**.

If the address is wrong, the communication test returns the message *Unable to communicate with device*.



Test communication fails with a wrong address

Text description of this image

3.2 Alternative address: add 16

If this address does not work, add 16 to it. Example: $59 + 16 = 75$.

Explanation of the process and another example:

Factory-address settings:

- Optical port: communication protocol is set to IEC 62056-21 mode E, HDLC address = 17
- Other communication ports: communication protocol IEC 62056-46, HDLC address related to the meter serial number, calculated according the algorithm.

HDLC address = Last two digits from meter serial number + 16

Example:

Meter serial number: 35623756
Last two digits: 56
HDLC meter address: $56 + 16 = 72$



NOTE!

The HDLC meter address must be unique. In a case, that two meters have the same one, address on one meter must be changed.

Explanation of the HDLC address calculation

Text description of this image

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 `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

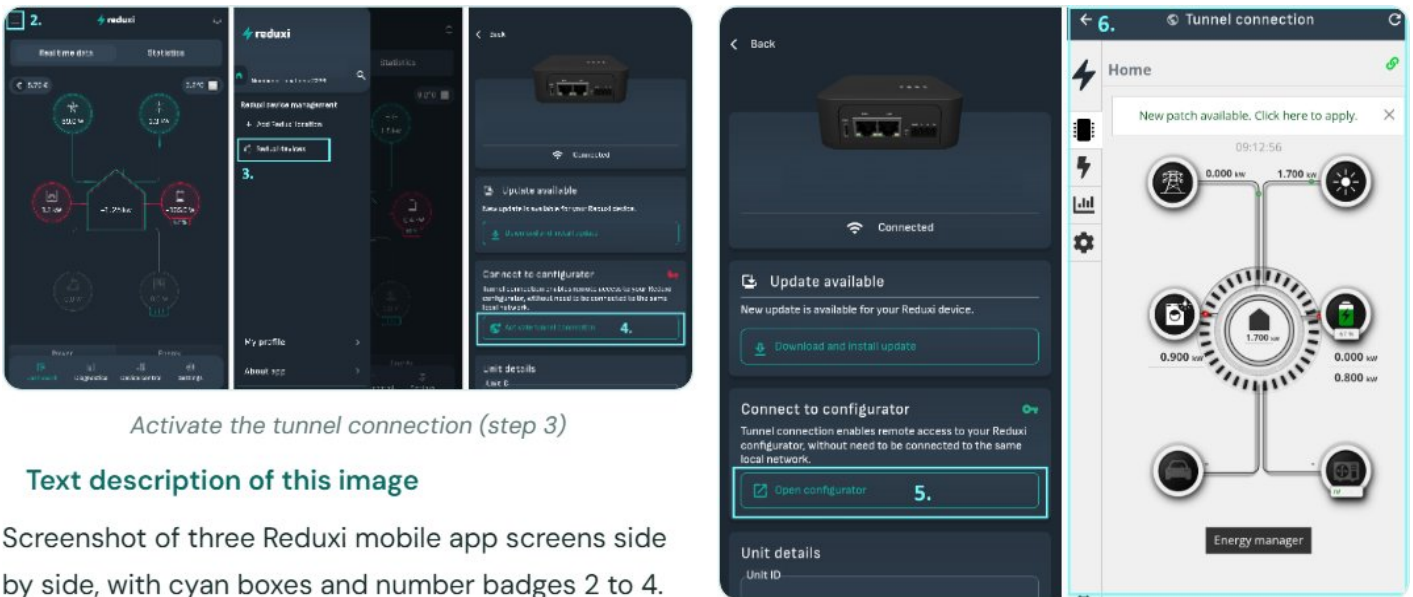
Activate the tunnel connection

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

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

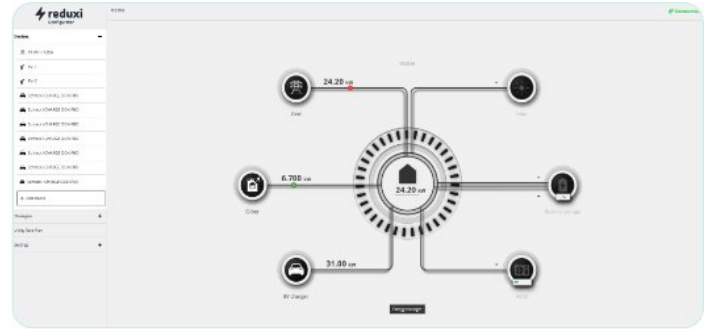
Log in

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



Reduxi Controller login screen

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Controller web interface after login

2. Text description of this image

Screenshot of the Reduxi Configurator web interface

5 Add the energy meter to Reduxi

5.1 Basic settings

Log in locally to the [Reduxi Configurator](#) on the controller (see [Point 4](#)). Click **Add device** and enter the basic settings.

Basic settings

Device type
Energy meter

Type
Iskraemeco MT880

Category
Grid

Name
Iskraemeco MT880

Back
Next

Basic settings: device type, type, category and name

Text description of this image

Press **Next**.

5.2 Communication channel and device configuration

Select the communication channel (see [Point 1](#): Channel 3 for option 1, Channel 1 for option 2). Then enter the device configuration:

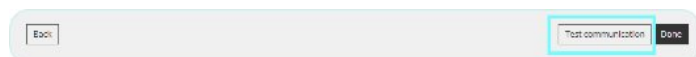
PARAMETER	VALUE
Serial number	Read it from the Iskraemeco energy meter (see Point 2).
Physical device address	See Point 3 .
Logical device ID	1 (default)
Client address	1 (default)
Password	Ask your utility provider for the password.
External CT ratio	Ratio of the currents. If you have 250A/5A, the result is 50 .
External VT ratio	High voltage ratio. Only if the meter is at medium voltage instead of 230 V.

5.3 Advanced settings

Enter and choose the advanced settings.

5.4 Test communication

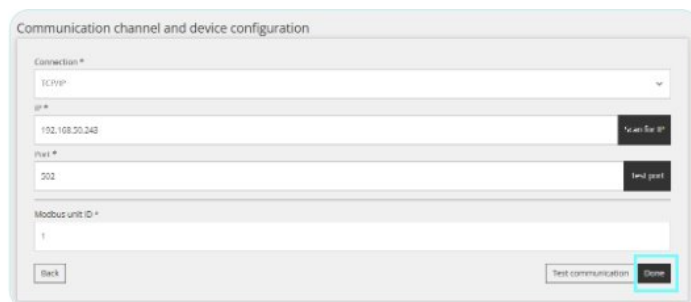
Click **Test communication** at the bottom of the wizard. It reads the Iskraemeco MT880 once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.



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 – Iskraemeco MT880** in the Reduxi Configurator as an additional test.

✓ Summary

Preparation (Points 1–3): Connect RS485 to the module CM-v-3 (pins 27, 29, 28). Read the serial number. Get the HDLC address: last two digits of the serial number, or add 16.

Iskraemeco MT880 (Point 1): Option 1 uses the optional card (Channel 3). Option 2 uses the pins on the meter (Channel 1).

Add to Reduxi (Points 4–5): Log in to the Reduxi Configurator. Click Add device, enter the basic settings, the communication channel and the device configuration. Test communication.

Go live (Point 6): Check the values under Devices – Iskraemeco MT880.

→ Common issues

ISSUE	SOLUTION
Test communication fails: Unable to communicate with device	Add 16 to the physical device address (for example $59 + 16 = 75$) and test again. See Point 3 .
Two energy meters have the same HDLC address	The HDLC address of a meter must be unique. Change the address of one meter.
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:



How to configure Iskraemeco MT880 in Iskraemeco SEP2W or Symbiot tool

Configure the MT880 with the Iskraemeco tool.



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