

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

The Reduxi P1 Wi-Fi / Ultra converter obtains messages from different energy meters like Iskraemeco AM550, Sagemcom T211 and other P1 meters.

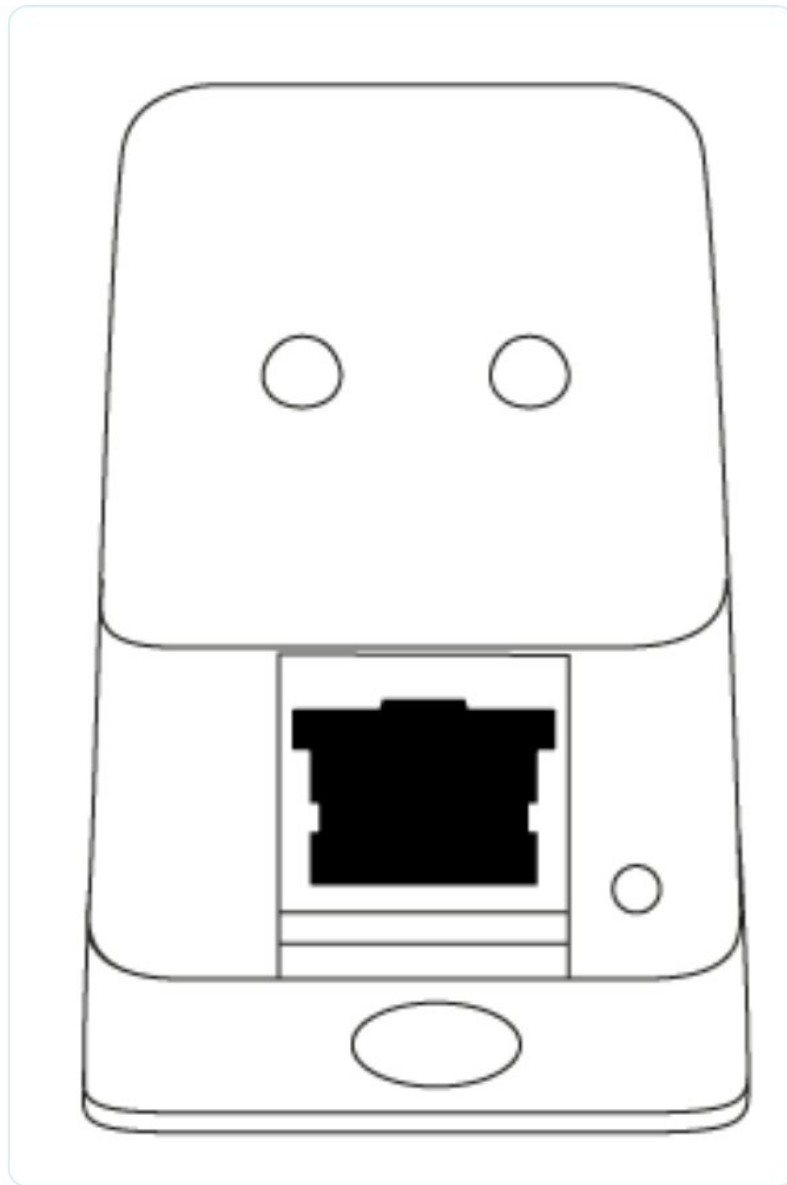
🔧 Reduxi P1 Wi-Fi / Ultra converter

⚡ Iskraemeco AM550 · Sagemcom T211

🔌 RJ12 cable, powered from the meter

🌐 Wi-Fi (TCP/IP) · RS485 · Modbus TCP/IP via Gateway





Reduxi Converter P1 Wi-Fi

Text description of this image

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1 About the converter and supported meters

The Reduxi P1 Wi-Fi / Ultra converter obtains messages from different energy meters, such as Iskraemeco AM550, Sagemcom T211 and other P1 meters.



P1 port Iskraemeco AM550

Text description of this image

Photo of the upper part of a white Iskraemeco AM550 smart meter, seen from the front and slightly from above. Printed on the housing: 'ISKRA' logo, 'AM550', 'Made in EU 2020', '1 000 imp/kWh' and '1 000



Cover for P1 port Sagemcom T211

2. Text description of this image

2 Physical connection between P1 port and converter

You connect the meter and the converter with an RJ12 cable. The same cable powers the converter. No extra power supply is needed. The RJ12 cable is part of the converter delivery.

2.1 Iskraemeco AM550

The P1 port is in the upper right corner of the AM550 energy meter. Connect the AM550 meter to the Reduxi Converter over the P1 port with the RJ12 cable. A cable is included in the package with the Reduxi Converter. The green LED on the top of the converter starts to glow.



P1 port in the upper right corner of the Iskraemeco AM550

Text description of this image



Encrypted meters

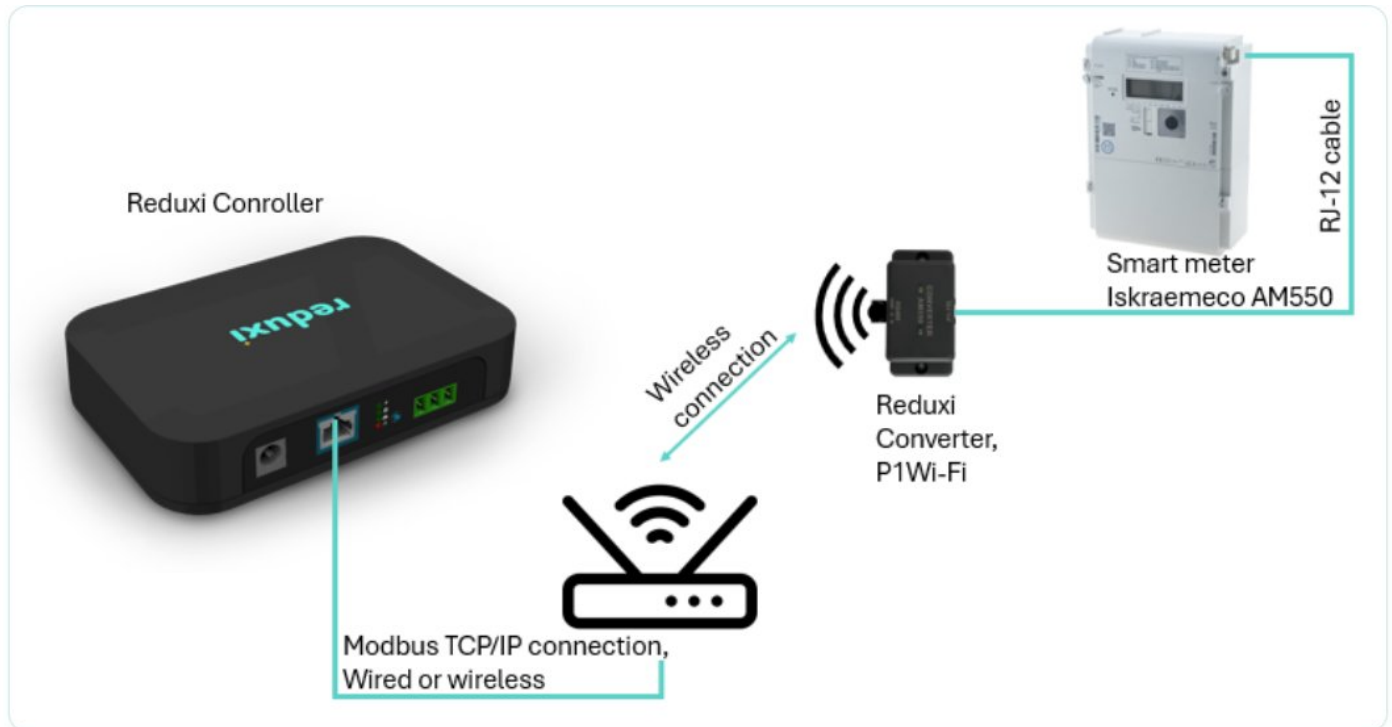
In practice, electrical distributors (DSO) allow non-encrypted communication. However, some energy meters still use an encrypted connection. Without encryption keys, you can test whether the connection from the Iskraemeco AM550 to the Reduxi Controller works. You see whether communication works (data is being received). If the keys are not entered, no data can be converted into a measurement, but you can see whether the physical communication works. You can add keys later via a remote connection to the Reduxi Controller. Recommended: ask the electrical distributor to use an unencrypted connection.

2.2 Connection to the Reduxi Controller

Three options connect the converter to the Reduxi Controller. They apply to the Iskraemeco AM550 and to the Sagemcom T211.

Option 1: Wireless connection to the Reduxi Controller

For details, see [Reduxi Converter P1 WiFi](#).

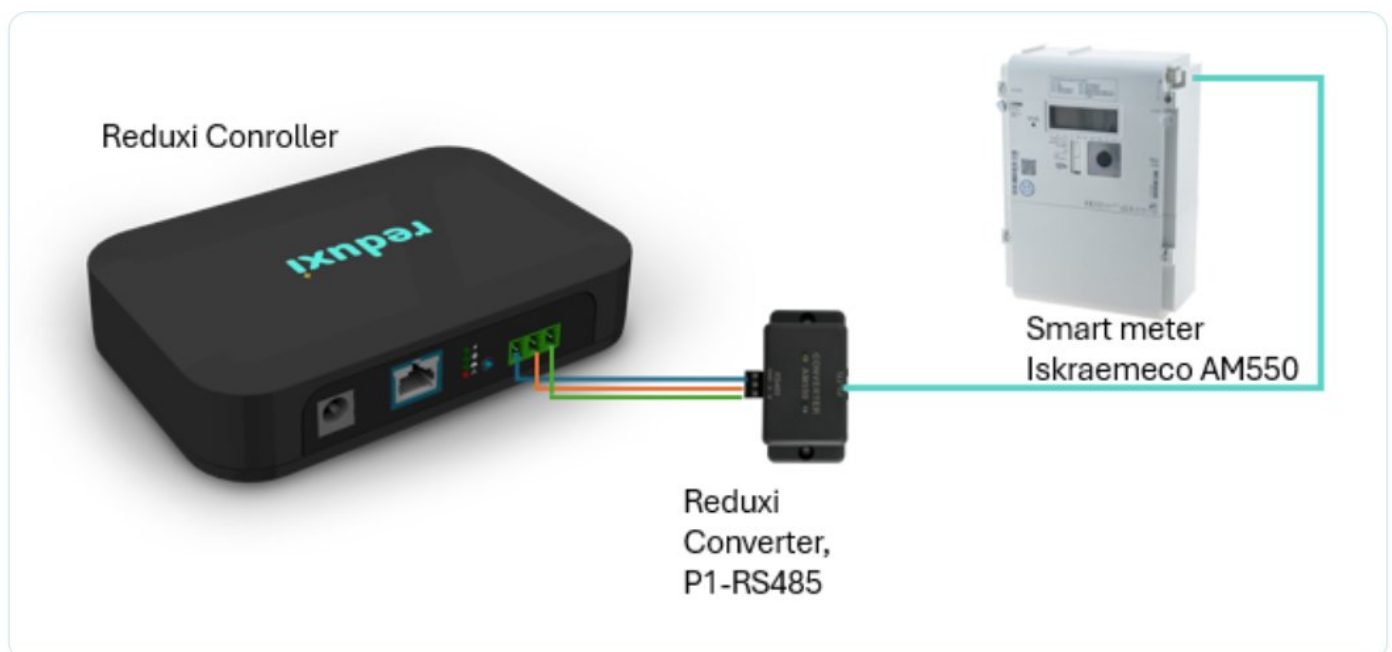


Wireless connection to the Reduxi Controller

Text description of this image

Option 2: Wired connection directly to the Reduxi Controller

This option applies to a wired RS485 connection.

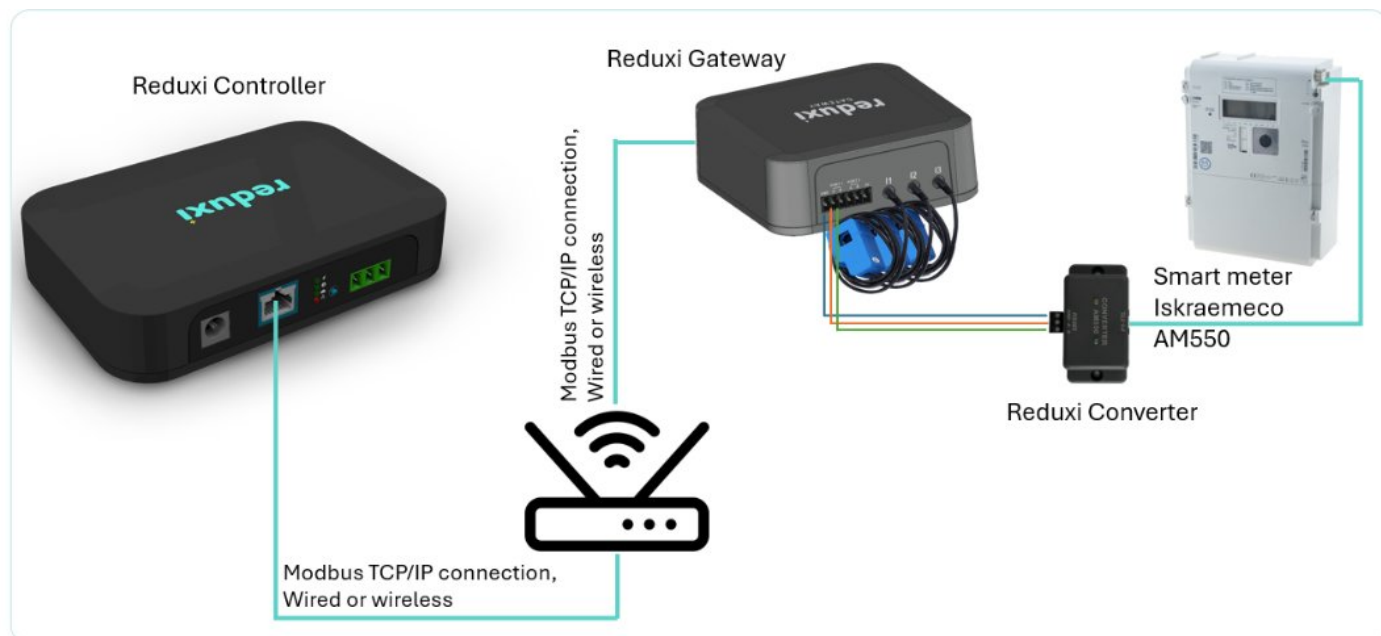


Wired connection directly to the Reduxi Controller

Text description of this image

Option 3: Physical connection to the Reduxi Gateway and connection via Modbus TCP/IP to the Reduxi Controller

This option applies to a wired RS485 connection.



Connection via the Reduxi Gateway and Modbus TCP/IP

Text description of this image

2.3 Sagemcom T211

The P1 port is in the lower left corner, under the plastic cover of the Sagemcom T211. Connect the P1 port of the Sagemcom T211 meter to the Reduxi Converter with the RJ12 cable. A cable is included in the package with the Reduxi Converter. The green LED on the top of the converter starts to glow.



P1 port under the cover of the Sagemcom T211

Text description of this image

The connection between the Sagemcom T211 and the Reduxi Controller is the same as for the Iskraemeco AM550. Use one of the options in Point 2.2: [wireless connection](#), [wired connection directly to the Reduxi Controller](#) or [connection via the Reduxi Gateway](#).

3 Connect the P1 Wi-Fi converter to the Reduxi Controller

For the first configuration, connect the Reduxi Converter to the Reduxi Controller over Wi-Fi (TCP/IP). For more information, follow [Reduxi Converter P1 WiFi / Ultra setup in Reduxi Configurator page](#).

3.1 Advanced settings

Fill in the advanced settings and choose the parameters shown in the image. Settings can vary depending on location needs. When you are done, click **Done** at the lower right of the screen.

1 Basic settings
2 Communication channel
3 **Advanced settings**

Advanced settings

Do you want to set data saving interval?
☐ No Default: 1 min

Do you want to set reading delay?
☐ No Default: 1000 ms

Do you want to set writing delay?
☐ No Default: 1000 ms

Do you want to set power generation limits and capabilities?
☐ No

Do you want to set power consumption limits and capabilities?
☐ No

Do you want to limit communication with the device to read-only?
☐ No Default: No

Do you want to invert direction for energy import and export?
☐ No Default: No

Do you want to exclude device from summary?
☐ No Default: No

L1 is connected to main feed

L2 is connected to main feed

L3 is connected to main feed

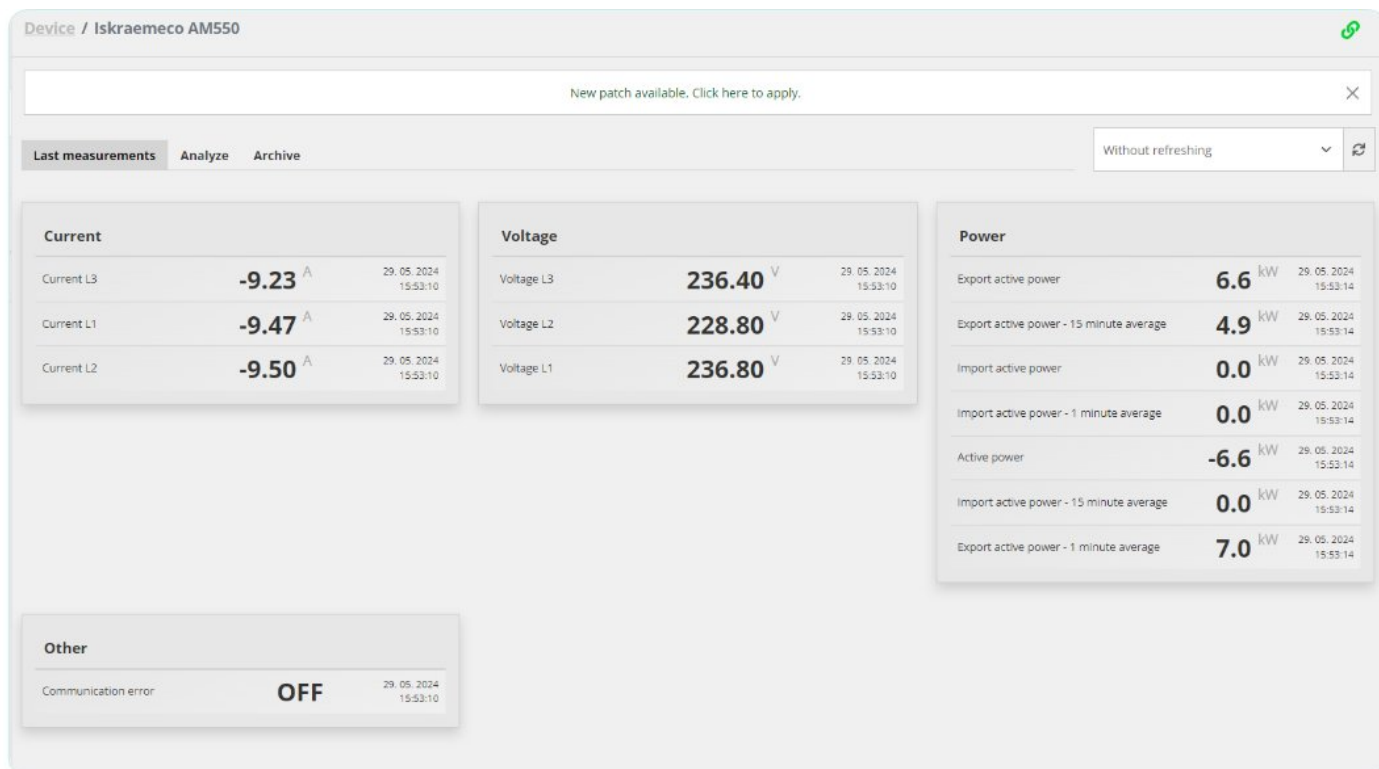
Back
Done

Advanced settings

Text description of this image

3.2 Last measurement

After communication is established, check the values on the device as an additional test. On the home screen, click the device selection and select the new energy meter in the tree structure.



Last measurements of the energy meter

Text description of this image

4 Monitor the meter and connect other grid meters

After you have added the device in the Configurator, you can monitor and control it in the **cloud application Reduxi**.

Guides for connecting other grid meters are [here](#). You can also use the search function above and enter the name or model of the device.

✓ Summary

Overview (Point 1): The converter obtains messages from P1 meters such as Iskraemeco AM550 and Sagemcom T211.

Physical connection (Point 2): Connect the meter P1 port to the converter with the RJ12 cable. Then choose how the converter reaches the Reduxi Controller: wireless, RS485 directly or via the Reduxi Gateway.

Connect to Reduxi (Point 3): Fill in the advanced settings, click Done and check the last measurement.

Next steps (Point 4): Monitor the meter in the cloud application Reduxi or connect other grid meters.

→ Common issues

ISSUE	SOLUTION
No data is converted into measurements	Some energy meters use an encrypted connection. Without encryption keys you see that data is received, but no measurement is created. Add the keys later via a remote connection to the Reduxi Controller, or ask the electrical distributor to use an unencrypted connection (recommended).
Green LED does not glow	The converter is powered through the RJ12 cable from the P1 port. Check the cable connection at the meter and at the converter.
Converter does not connect to the Reduxi Controller	Follow the steps in the guide Reduxi Converter P1 WiFi / Ultra setup in Reduxi Configurator page, including its troubleshooting section.

→ Related articles

Matching guides from the Reduxi knowledge base:



Reduxi Converter P1 WiFi / Ultra setup in Reduxi Configurator page

Connect the converter to Wi-Fi, add it in the Reduxi Configurator, test communication, specifications and troubleshooting.



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