

## How to connect Landis+Gyr E650 CU-P22 energy meter with Reduxi controller

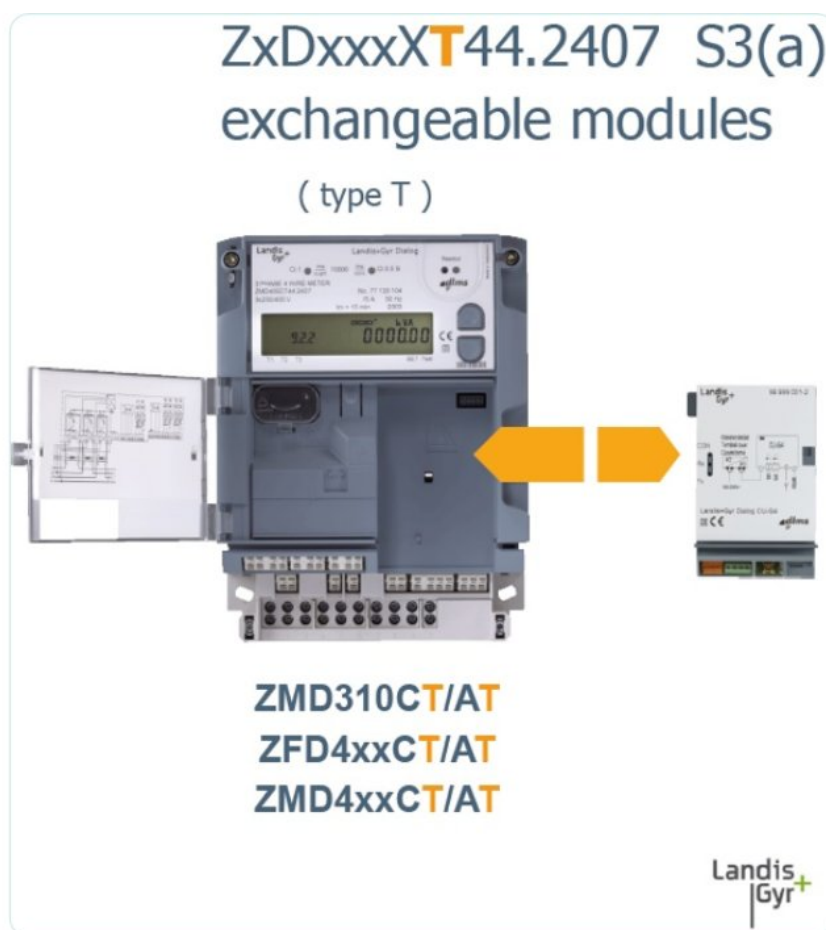
Connect the Landis+Gyr E650 energy meter with the communication module CU-P22 to the Reduxi Controller via RS485 and add it in the Reduxi Configurator.

🔧 Landis+Gyr E650 · module CU-P22 · Reduxi Controller

🔌 RS485 (RJ12 6P6C socket)

📄 HDLC address = last 4 digits of serial number + 1000 · client address 32

# Landis+Gyr



Energy meter with exchangeable communication module

Text description of this image

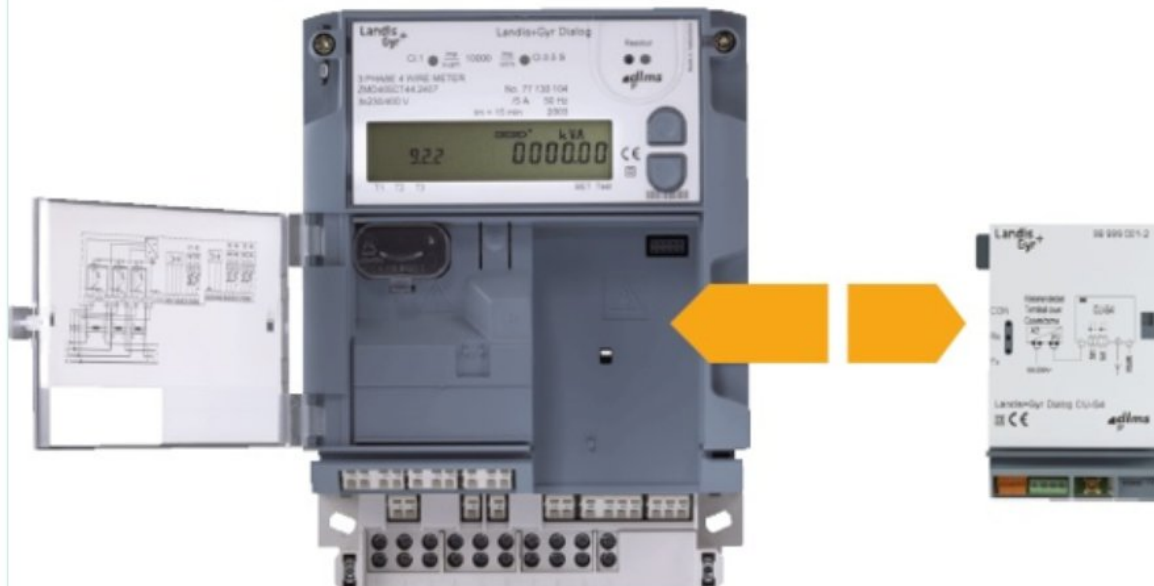
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## **1** Check that the energy meter supports the module CU-P22

To communicate with the energy meter, you need the module CU-P22. The module is on the right side of the picture below.

# ZxDxxxXT44.2407 S3(a) exchangeable modules ( type T )



**ZMD310CT/AT**  
**ZFD4xxCT/AT**  
**ZMD4xxCT/AT**

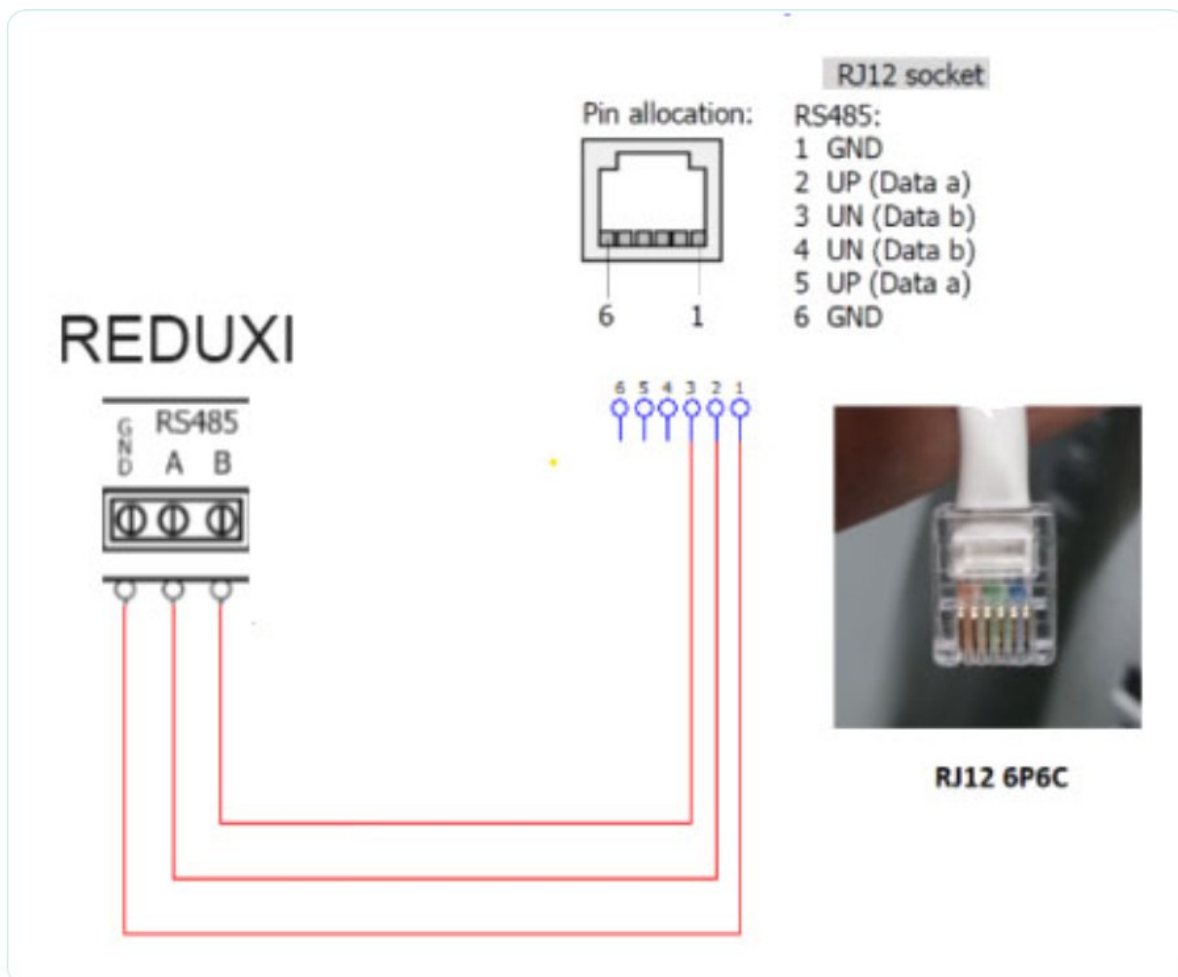
Landis+Gyr

*Energy meter and exchangeable communication module*

Text description of this image

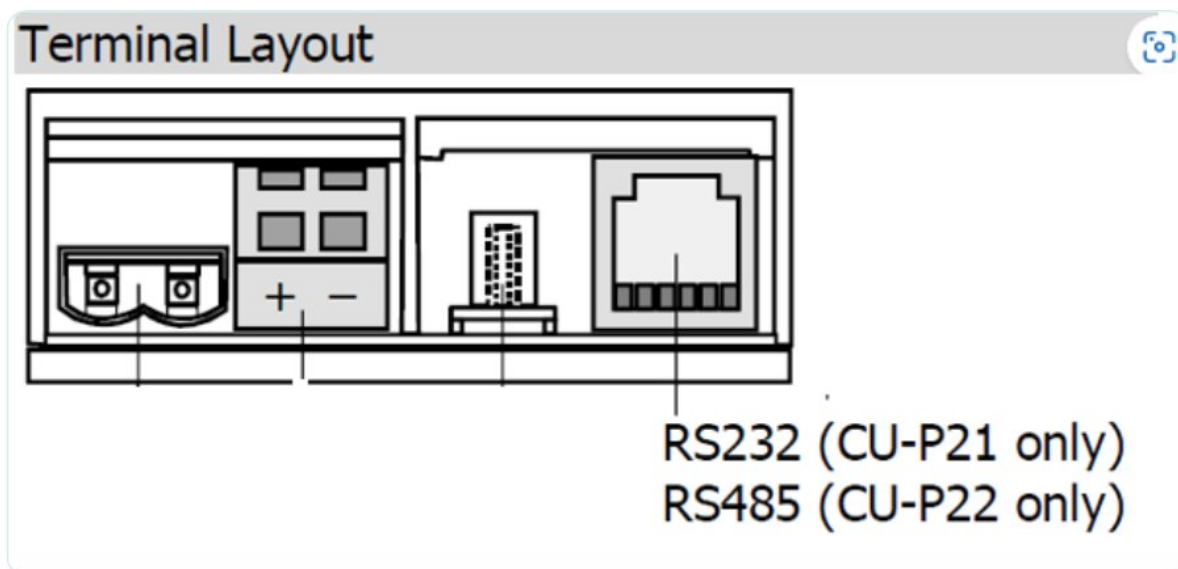
## **2** Connect the Landis+Gyr E650 with the module CU-P22 to the Reduxi Controller

Connect the energy meter to the Reduxi Controller over RS485. See the pictures below.



Pinout of the RS485 port

Text description of this image



Terminal layout of the module

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### 3 Get the physical device address (HDLC address)

The physical HDLC device address is the last four digits of the serial number plus 1000. The range of addresses is limited and some addresses are reserved.

**Physical HDLC device address = last 4 digits of serial number plus 1000 (because with dlms the range of addresses is limited and some addresses are reserved), e.g. 3799 for a serial number 73852799 (2799 + 1000 = 3799).**

*Rule for the physical HDLC device address*

Text description of this image

Example:

| ITEM                | VALUE                |
|---------------------|----------------------|
| Serial number       | 73852799             |
| HDLC device address | $2799 + 1000 = 3799$ |

### 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

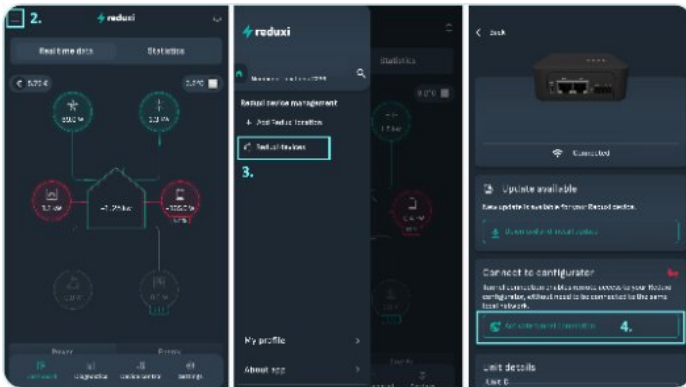
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

### 3 Activate the tunnel connection

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

### 4 Open the configurator

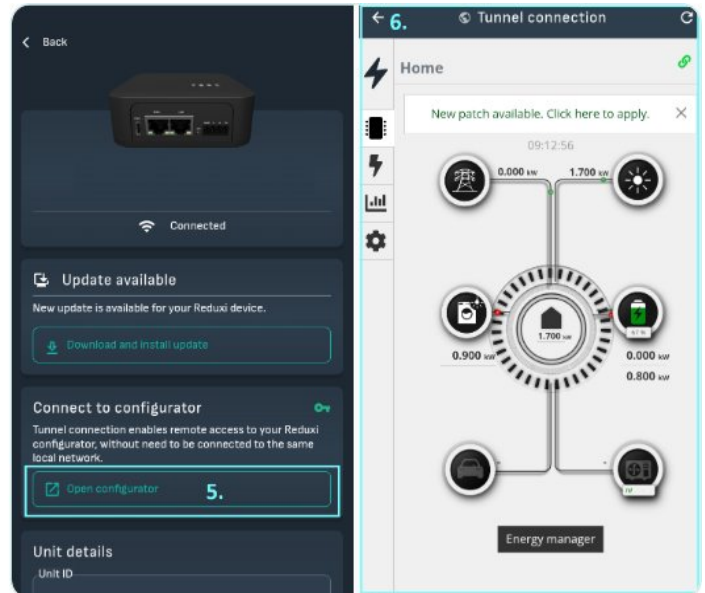
Tap **Open configurator**. The Reduxi web interface opens.



Activate the tunnel connection (step 3)

#### 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

## 4.2 Via a web browser

### 1 Open the login page

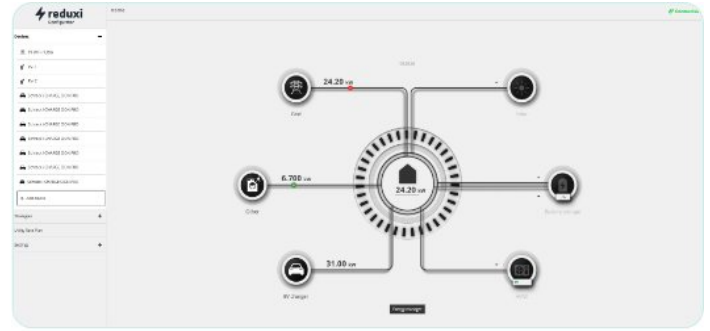
On a device in the same network, open a web browser and enter the controller's IP address or **<http://reduxi.local>**. You can find the controller's IP address in your router's device list or in the Reduxi app under **Reduxi devices**.

### 2 Log in

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



Reduxi Controller login screen



Controller web interface after login

## Text description of this image

## 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. Press **Next**.

## 5.2 Communication channel and device configuration

Select the communication channel. Then enter the device configuration:

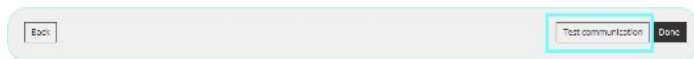
| PARAMETER               | VALUE                                                                        |
|-------------------------|------------------------------------------------------------------------------|
| Serial number           | Read it from the energy meter.                                               |
| Physical device address | See <a href="#">Point 3</a> .                                                |
| Logical device address  | <b>1</b> (default)                                                           |
| Client address          | <b>32</b> (default)                                                          |
| Password                | Ask your utility provider for the password.                                  |
| External CT ratio       | Ratio of the currents. If you have 250A/5A, the result is <b>5</b> .         |
| 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

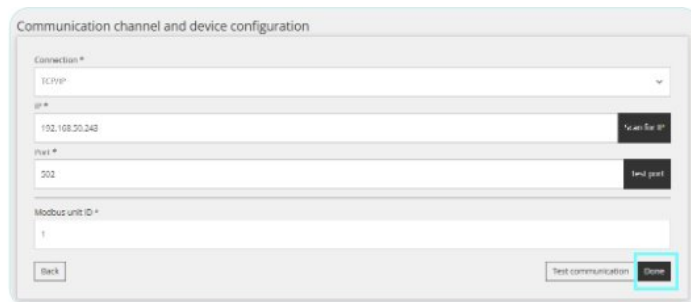
Click **Test communication** at the bottom of the wizard. It reads the Landis+Gyr E650 CU-P22 once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.



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

Communication channel and device configuration

## 6 Check the readings

### 6.1 Last measurements

After communication is established, check the values under **Devices – Landis+Gyr E650 CU-P22** in the Reduxi Configurator as an additional test.

### ✓ Summary

**Preparation (Points 1–3):** Check that the meter has the module CU-P22. Connect it to the Reduxi Controller over RS485. Get the physical HDLC address: last four digits of the serial number plus 1000.

**Landis+Gyr E650 CU-P22 (Points 1–3):** The module CU-P22 provides the RS485 port. Example: serial number 73852799 gives the address 3799.

**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 – Landis+Gyr E650 CU-P22.

## → Common issues

| ISSUE                                          | SOLUTION                                                                                                         |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| No RS485 port on the energy meter              | Only the module CU-P22 has an RS485 port. The module CU-P21 has RS232 only. See <a href="#">Point 1</a> .        |
| Wrong physical device address                  | The address is the last four digits of the serial number plus 1000. See <a href="#">Point 3</a> .                |
| 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 connect Landis+Gyr E570 ZMY S2 energy meter with Reduxi controller

Connect a Landis+Gyr E570 energy meter 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