kamstrup

User Guide

# MeterToolX



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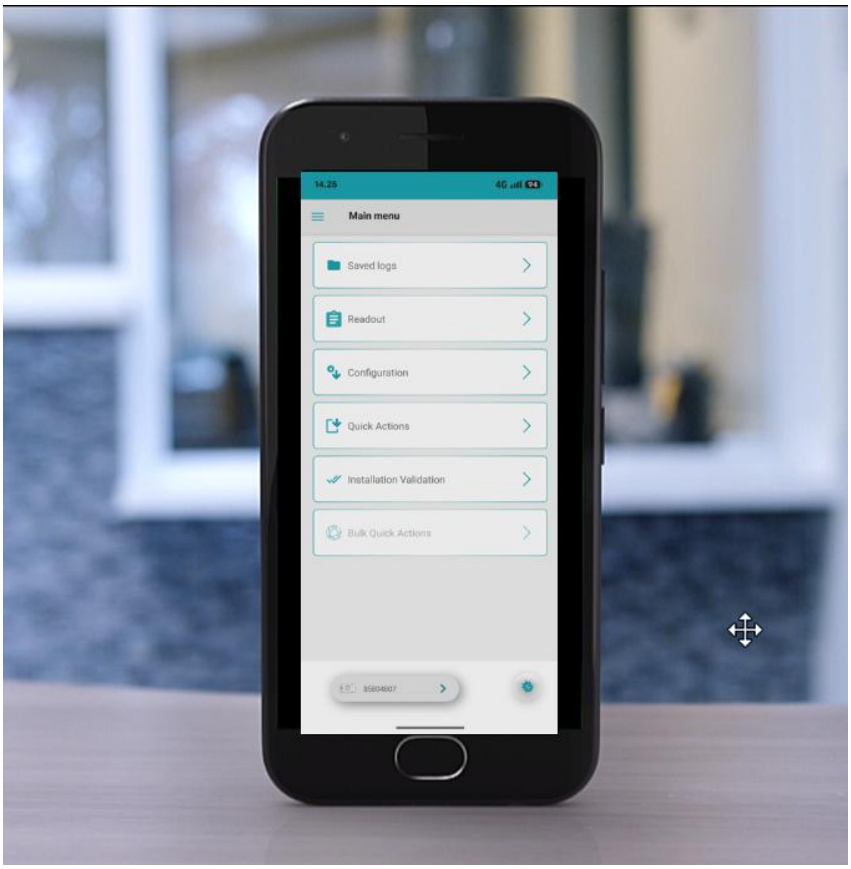
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# 1. Introduction

MeterToolX is an application for Android devices that assists you with onsite meter tasks.

The application enables you to configure and read the log of Kamstrup's heat, cooling and water meters. Log readings can be displayed in the application or exported for further analysis.

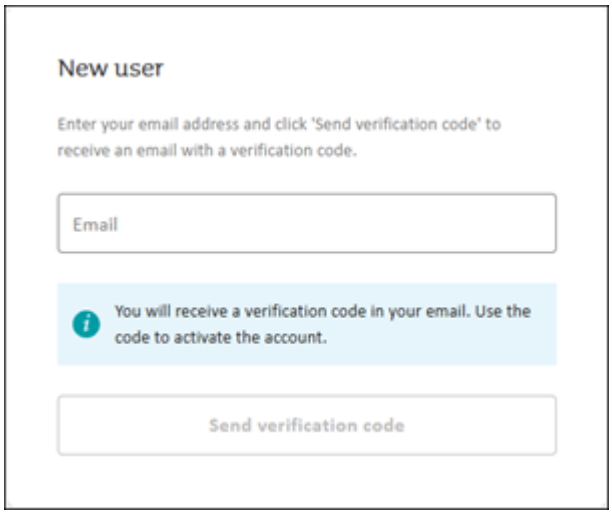


# 2. Installation and login to MeterToolX

To log in to MeterToolX you need a My Kamstrup login. If you already have a My Kamstrup login, go to “2.2 How to install and log in to MeterToolX”. Otherwise follow the steps below to create a My Kamstrup login.

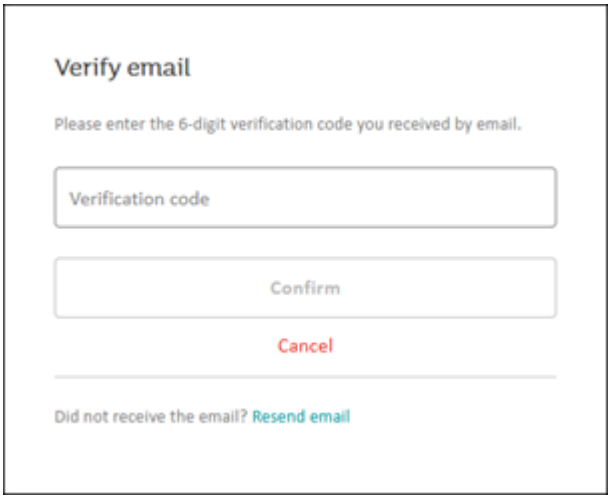
## 2.1 How to create a My Kamstrup login

1. Go to https://account.kamstrup.com/create/.
2. Enter the email address you want to use for your My Kamstrup login, and click **Send verification code**:




An email with a verification code will now be sent to the specified email address. If you cannot find the email, check your SPAM folder.

3. Enter the verification code received by email and click **Confirm**:



4. Enter your information and the desired password in the **Password** and **Confirm password** fields:



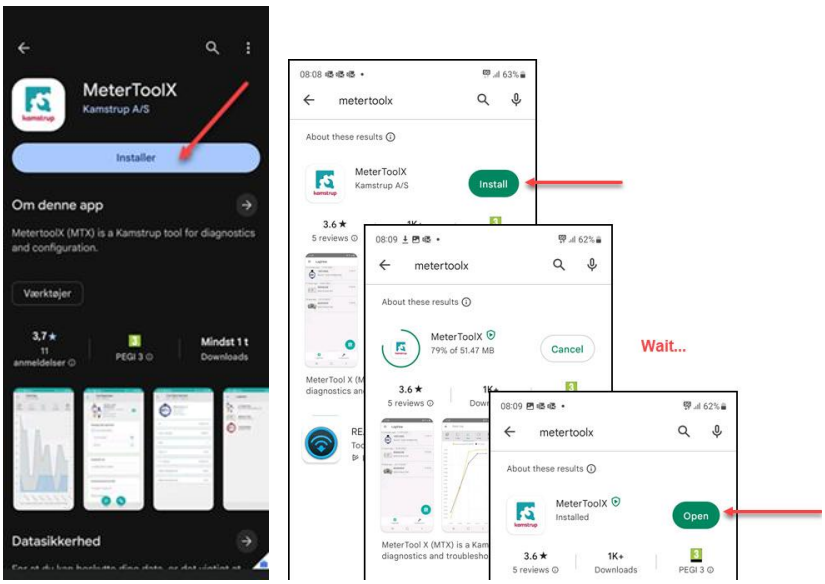

5. Click **Complete registration.**

You now have a My Kamstrup login. Make sure to remember your password.

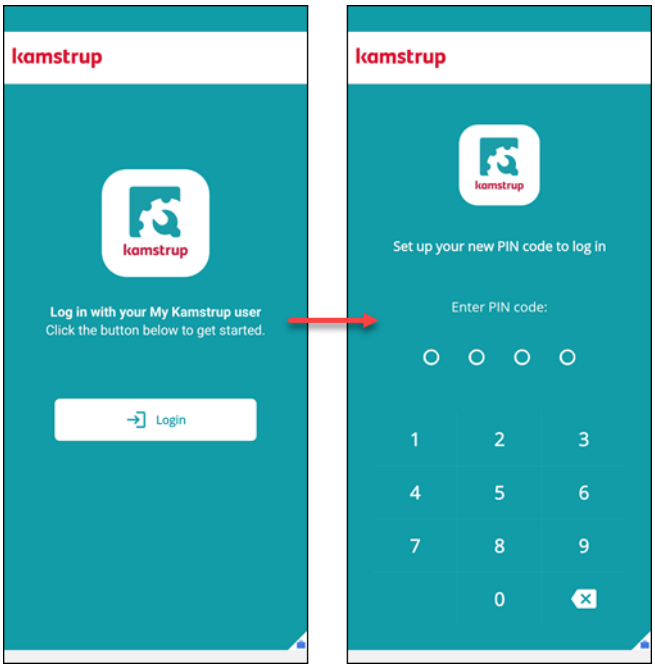
## 2.2 How to install and log in to MeterToolX for the first time

Use the following procedure to install and log in to MeterToolX on your Android smartphone or tablet:

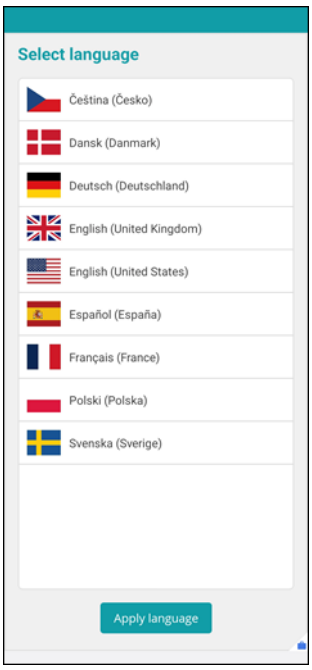
1. Go to Google Play and download MeterToolX:



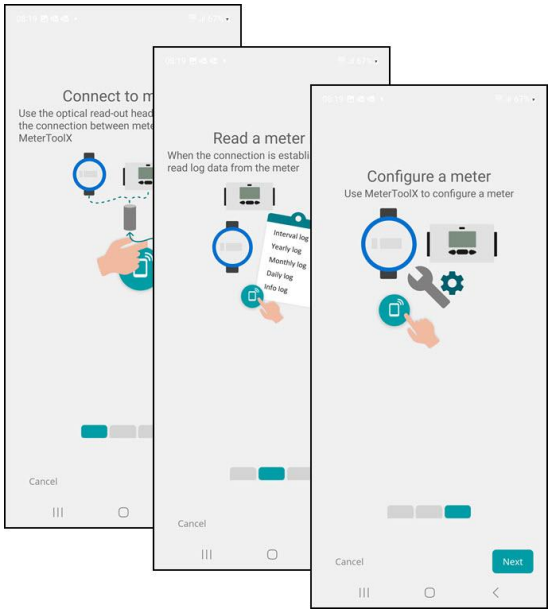

2. Tap **Login** and enter the My Kamstrup login created in section 2.1. Then select a PIN code for MeterToolX:



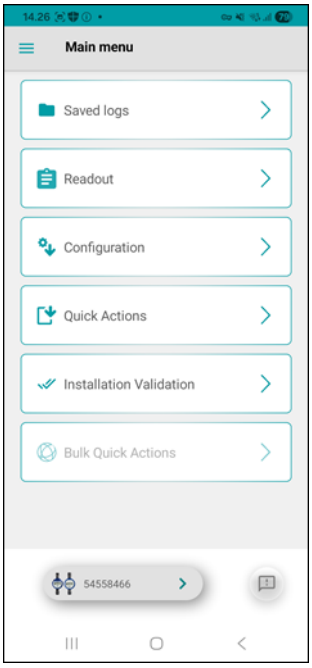
3. Select your preferred language and tap **Apply language**:




4. Click **Next** on the three info pages about MeterToolX:



The main menu now appears, and you are ready to use MeterToolX:



# 3. Connecting to a meter

To use MeterToolX, you need to connect to the meter whose log you want to read or that you want to configure.

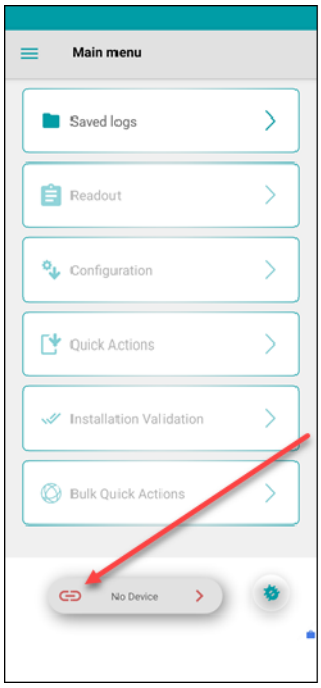
You connect to Kamstrup meters using an optical readout head. Follow the relevant procedure below depending on whether you have a Bluetooth  or a USB  optical readout head:

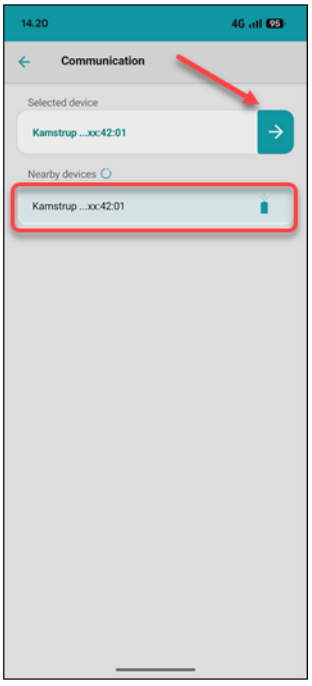
**Note** Using the USB optical readout head requires a USB adaptor:



## 3.1 How to connect using Bluetooth optical readout head

1. Turn on the optical head and wait until the LEDs stop flashing.
2. In MeterToolX, tap the connect  icon and select the readout head:

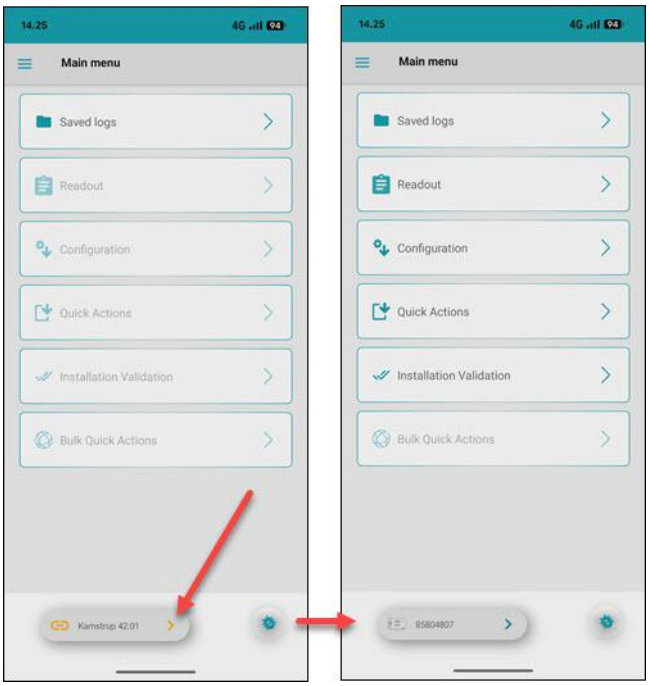


3. Place the optical head on the meter:




4. In MeterToolX, tap the ‘connect to meter’ icon. Once connected, tap the desired option in the main menu:

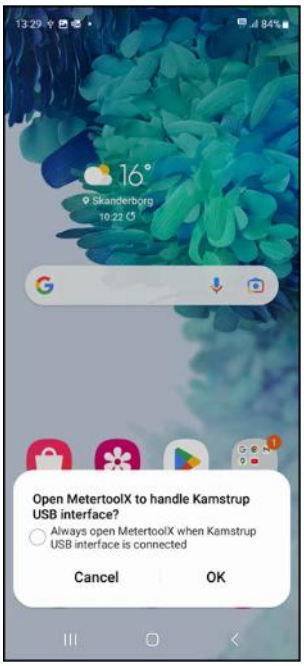



## 3.2 How to connect using USB optical readout head

1. Place the optical head on the meter (cable pointing away from the display) and plug it into your Android device by using a USB adaptor:



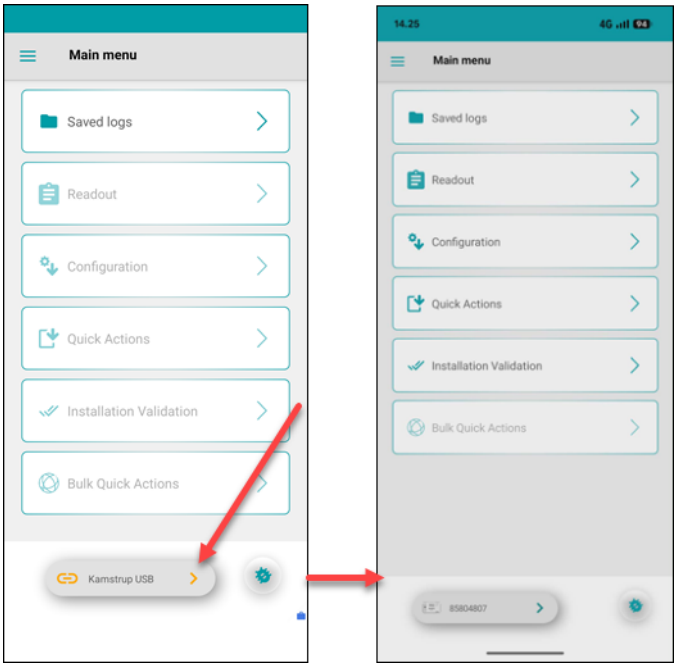
2. In the message that appears, tap **OK** to open MeterToolX:







3. Click 'connect to meter'. Once connected, tap the desired option:



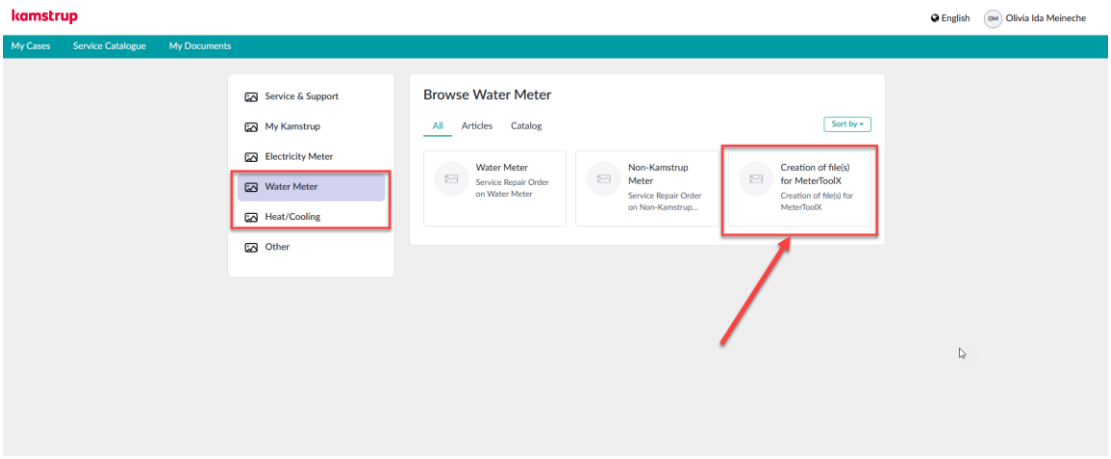
# 4. Reading the meter

There are three ways of reading a meter in MeterToolX:

- Normal log reading: You use the Readout menu to select the type of log, time period and the exact values you want to read. The menu covers all available logs in the meter.
- Live data readout: You access the current readings on the meter display.
- Quick reading: You select a file with a predetermined set of log options to quickly read the log. This is particularly useful if you need to read the log of many meters.

  MeterToolX comes with default quick reading files for a number of meters.

  It is possible to buy customer-specific quick reading files that can be uploaded on-the-fly to MeterToolX. If you are interested, send your request to Kamstrup by using the request "Creation of file(s) for MeterToolX". You find the request by logging into My Kamstrup and accessing the support portal.

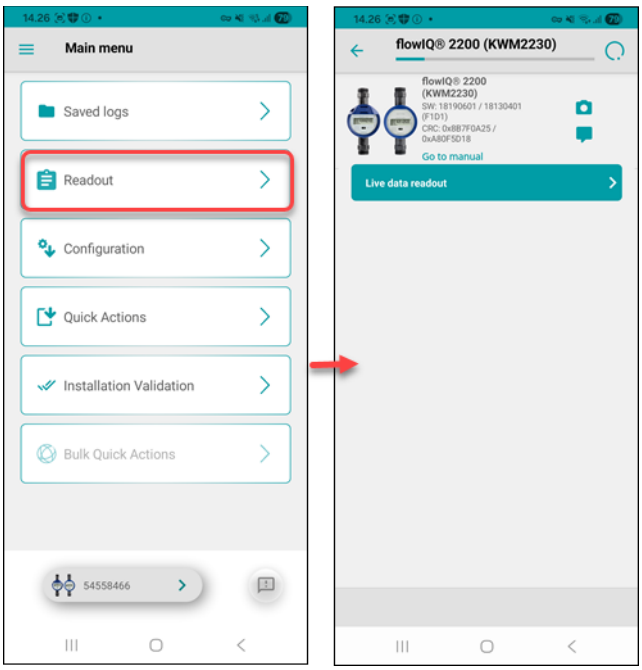



Once you have read the log of a meter, you can share it by email if desired.

## 4.1 How to read the log of a meter

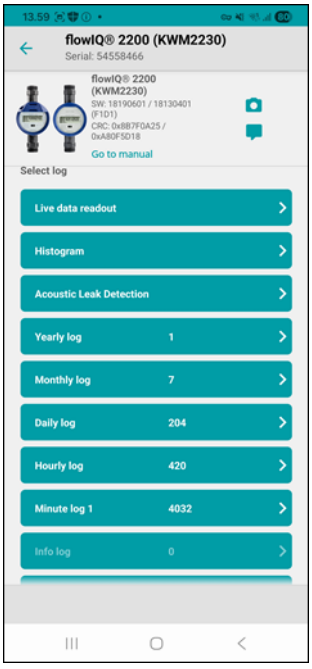
Use the optical head as described in the previous chapter, and follow the steps below to read the log of a meter:

1. In MeterToolX, tap **Readout** in the main menu:

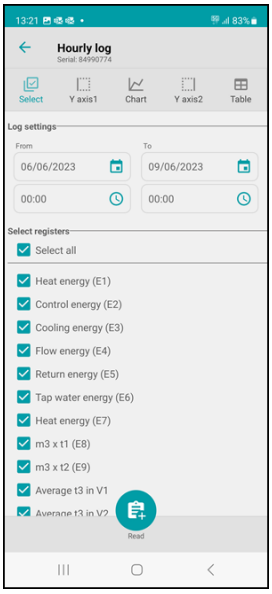



Wait for the list of available logs to be generated.

2. Select the log you want to read:

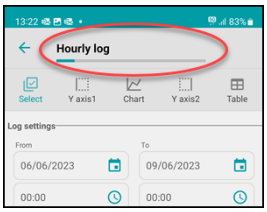


3. Select the time period and the registers you want to read:

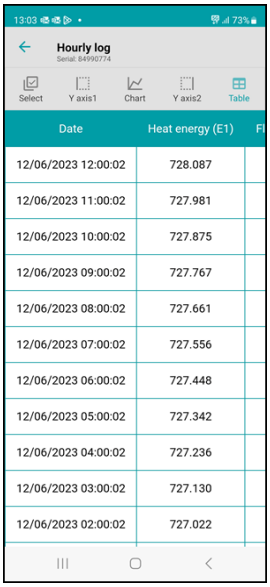



4. Click **Read** :

   Wait for the log to be read. You can follow the reading via the process bar at the top of the window:



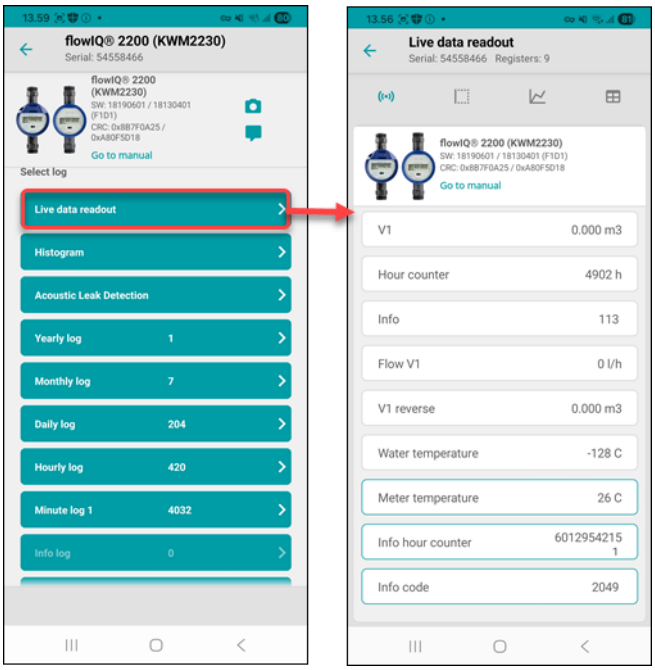

5. Tap **Chart**  or **Table**  at the top of the screen depending on how you want to see the data:



## 4.2 How to perform a live data readout

The current readings on the meter display can be reflected in MeterToolX. This means that if the meter display is not easily accessible, you can use this feature to check the current readings in MeterToolX- for example when adjusting the flow.

1. In the **Readout** menu, tap **Live data readout**.



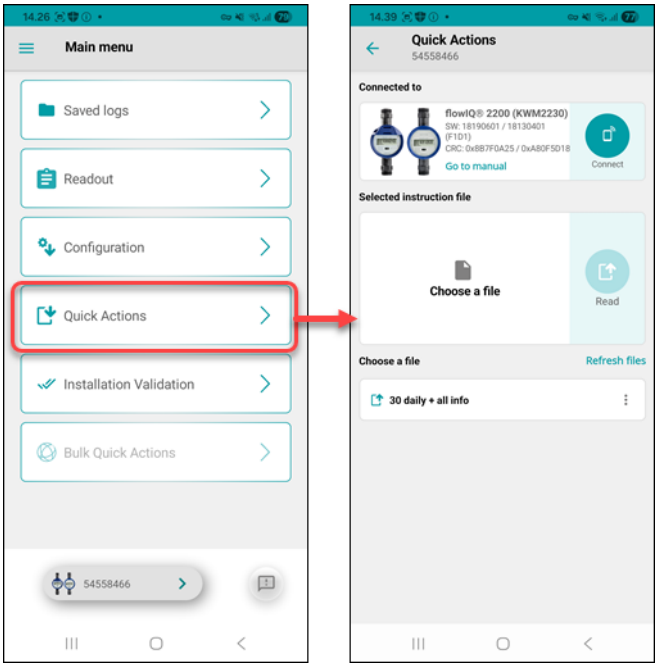

The current readings of the meter are now displayed and continuously updated in MeterToolX.

## 4.3 How to perform a quick reading of the log

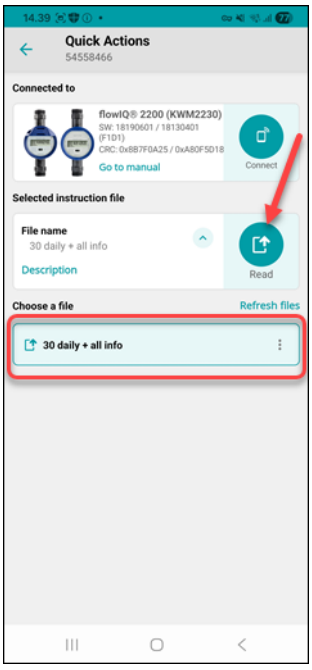
Use the optical head as described in the previous chapter, and follow the steps below to perform a quick reading the meter's log:

1. In MeterToolX, tap **Quick Actions** in the main menu.

   MeterToolX now finds the quick reading files for the current meter type and MeterToolX login:




2. Tap the desired quick reading file at the bottom of the screen, and tap **Read**:



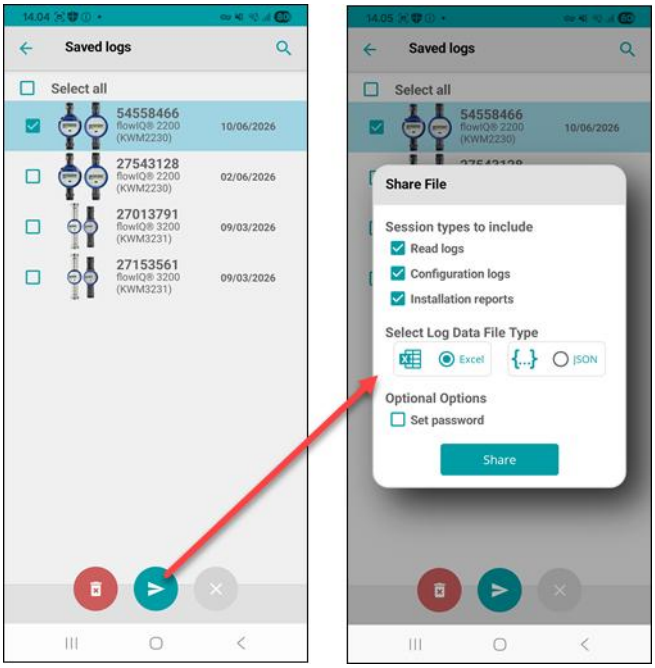

   You can find the log reading if you go back to the main menu (by tapping  in the upper left corner) and tap **Saved logs**.

## 4.4 How to share a log file by email

Follow the procedure below to send an email with a log file directly from MeterToolX:

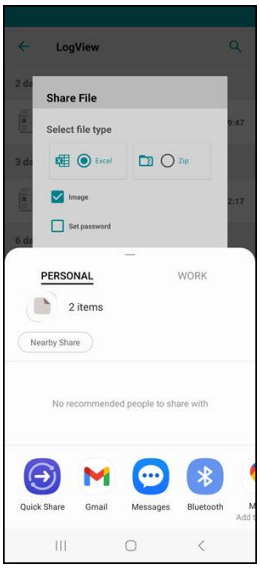
1. In MeterToolX, tap **Saved logs** in the main menu.

2. In the list of log readings that appears, select the desired log reading and tap the  icon:




3. Select which session types to include, log data file type (Excel or JSON) and a password if required. Then tap **Share**.

4. Select your email application:




You are now able to send the selected logs to the desired email.

# 5. Meter configuration

There are three ways of configuring a meter in MeterToolX:

1. Reading and changing the configuration: You read the current configuration and make the desired change to a configuration.
2. Quick configuration: You select a file with a predetermined configuration change. This is particularly useful if you need to change the configuration of many meters – or just want to minimise the risk of configuration errors. MeterToolX comes with default quick configuration for setting the position of the flow sensor to inlet or outlet (and more may be added over time).
   The quick configuration may in some cases be the only way to change a specific configuration and may require customer-specific quick configuration files. See section below.
3. Bulk quick configuration: As with the quick configuration, you select a file with a predetermined configuration change. However, with the Bulk Quick Configuration the reconfiguration is performed with READy Converter, and meters are required to have 2-way communication. The Bulk Quick Configuration enables reconfiguration without having direct access to the meters as it can be performed from the street.

### Creation of Quick Configuration files for 2 and 3:

It is possible to buy customer-specific quick configuration files that can be uploaded to MeterToolX.

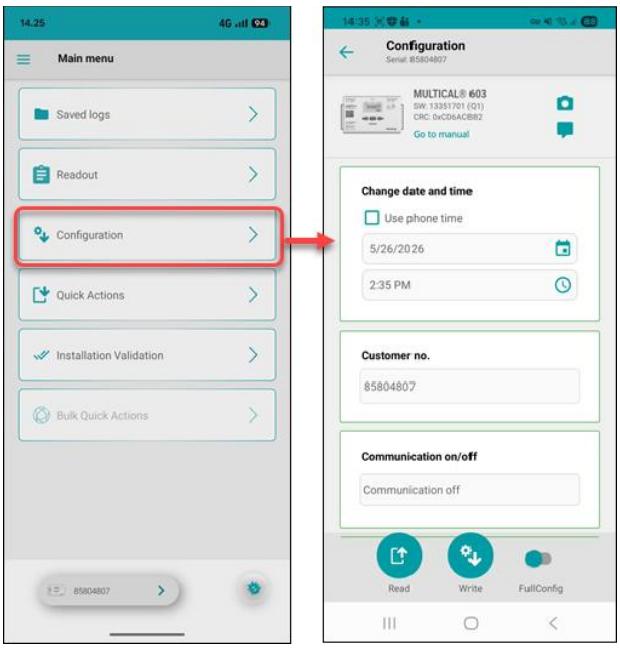
The creation of customer-specific quick configuration files is required for example for the Bulk Quick Configuration feature and if you wish to change the data package for a Water meter with for example NB-IoT or LoRaWAN.

If you are interested, send your request to Kamstrup through My Kamstrup Service Desk. In the Service Desk, select “Creation of Configuration files for Field Tools”.
It is necessary to inform Kamstrup of the desired configuration, the My Kamstrup user who should perform the reconfiguration, and which serial numbers should be reconfigured.

## 5.1 How to read or change the meter configuration

Use the optical head as described in chapter 3, and follow the steps below to read and change the configuration of a meter:

1. In MeterToolX, tap **Configuration** in the main menu:




Wait for the configuration to be read.

You can now see the configuration. The reading of the configuration appears in the configuration list, and you can select the different readings in the list to check and compare the configuration at various times.

2. <u>To change the configuration, follow the steps below:</u>

   a. If the meter is a heat meter, make sure it has access to the SETUP loop.

      If the meter has not been commissioned yet, the meter is in transport mode and has access to the SETUP loop. If the meter is in operation, temporary access to the SETUP loop can be created by briefly separating the calculator top and base, after which it is possible to configure the meter within a period of 4 minutes.

      For water meters, the setup mode is automatically activated.

   b. Change the desired option(s).

      **Note** If a FullConfig button is available at the bottom of the screen, additional configuration options can be accessed by toggling this button.

   c. Tap the **Write** button.

      Wait for the change(s) to be applied.

   d. Tap **OK** in the message that appears telling you that the configuration has been changed.

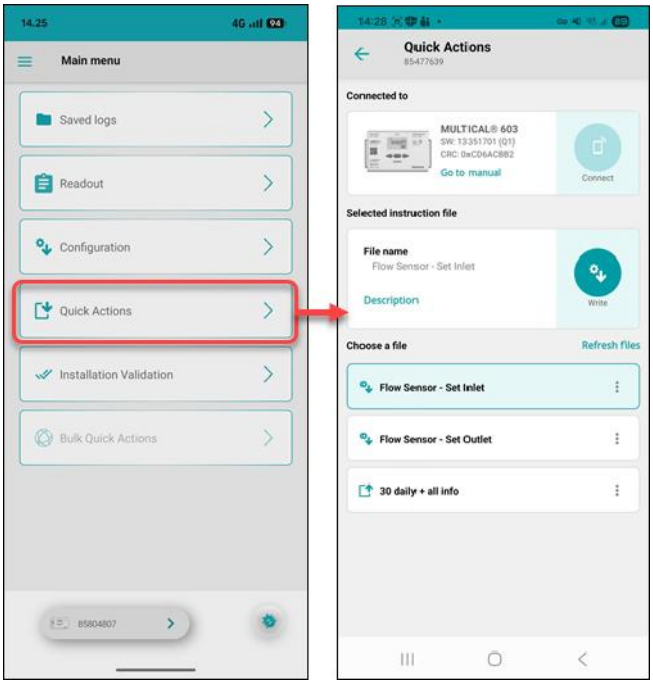
## 5.2 How to perform a quick configuration of a meter

See page 19 if you wish to have custom files created for the purpose of quick configuration.

Use the optical head as described in chapter 3, and follow the steps below to perform a quick configuration of the meter:

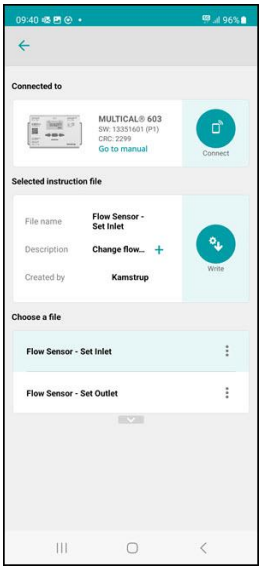
1. In MeterToolX, tap **Quick Actions** in the main menu.

   MeterToolX now finds the available quick configuration files:




2. Tap the desired quick configuration file at the bottom of the screen.

   A description of the quick configuration is displayed in the middle of the screen:



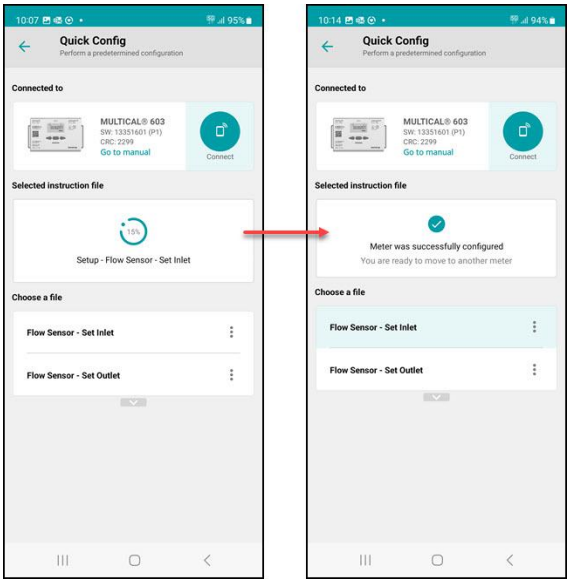
3. If the meter is a heat meter, make sure it has access to the SETUP loop.

   If the meter has not been commissioned yet, the meter is in transport mode and has access to the SETUP loop. If the meter is in operation, temporary access to the SETUP loop can be created by briefly separating the calculator top and base, after which it is possible to configure the meter within a period of 4 minutes.

   For water meters, the setup mode is automatically activated.

4. Tap Write .

   Wait for the configuration to complete:

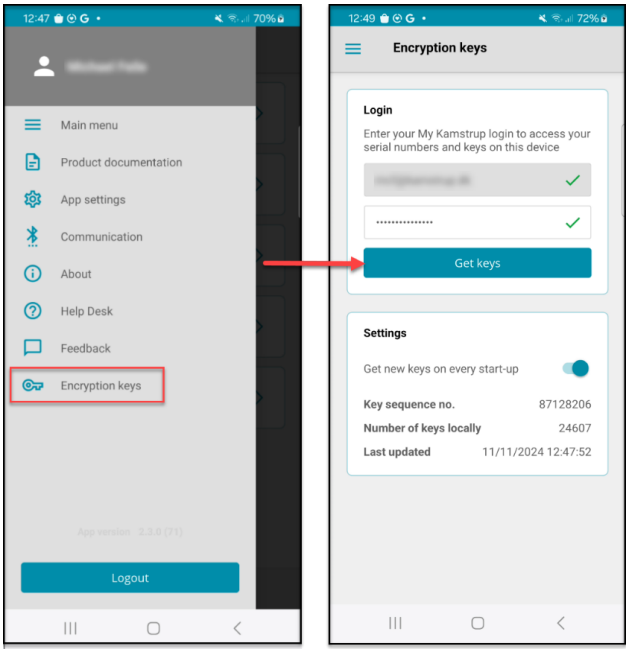


## 5.3 How to perform Bulk Quick Configuration of meters

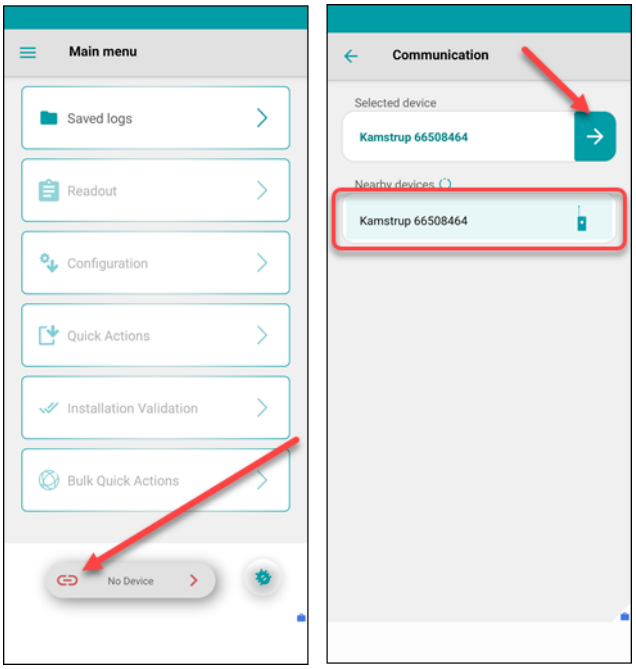
Bulk Quick Configuration is only available for meters with 2-way communication.
See page 19 if you wish to have custom files created for the purpose of Bulk Quick Configuration.

1. In MeterToolX, tap **Encryption Keys** in the main menu. Then tap **Get keys** to retrieve the keys.

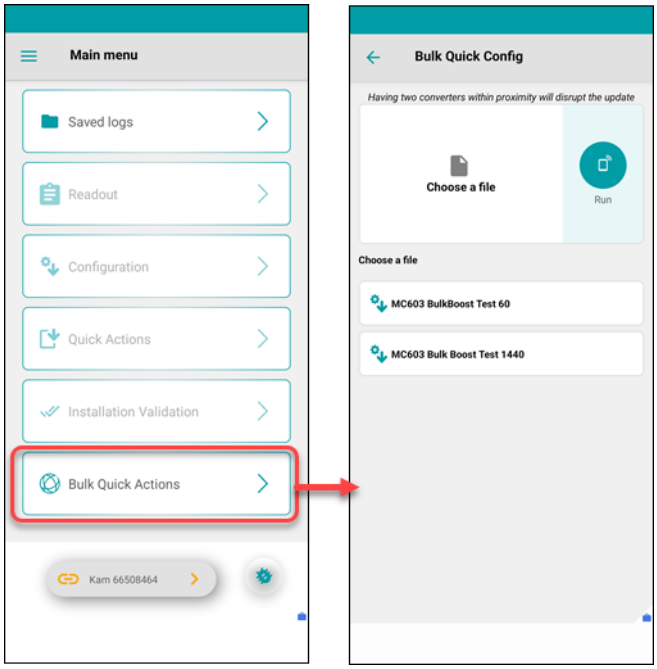
   If more users are required to perform Bulk Quick Configuration, rights to encryption keys can be transferred via My Kamstrup.




2. Tap the connect icon to connect to the converter and then select it:



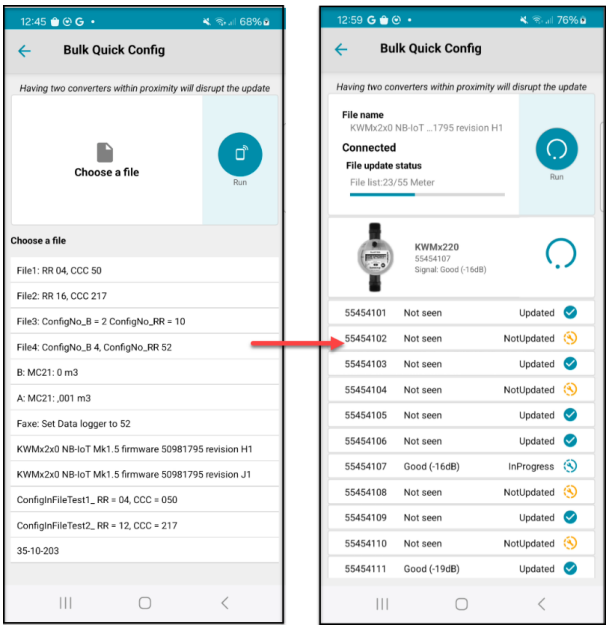
Bulk quick actions are now available, and the configurations can be selected:




**Note** Do not use two C2 converters close together, as they may interfere with each other and fail to run the files.

3. Select the required file and press **Run**.

   The Bulk Quick Configuration will now proceed to reconfigure the meters within reasonable range and show the progress in a list.



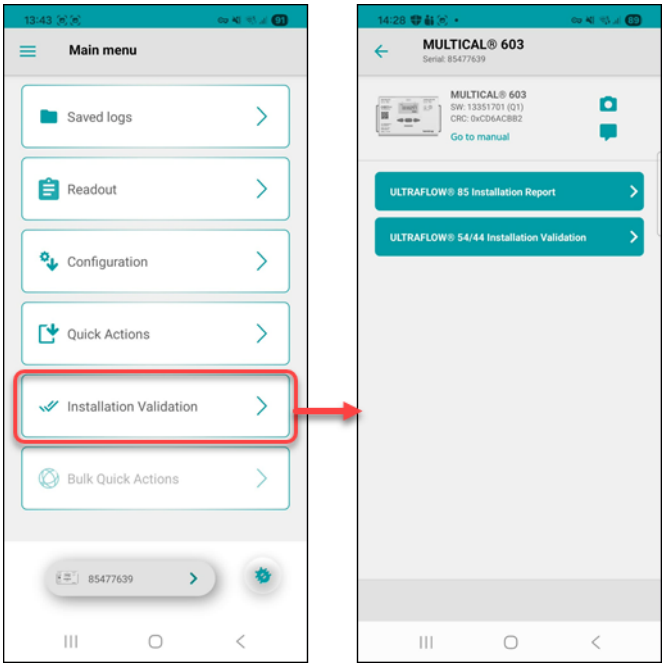

4. Continue moving within range of the meters until reconfiguration is complete.

# 6. Installation validation

## 6.1 How to validate an installation of a heat/cooling meter

It is possible to validate installations of a MULTICAL® 603 or a MULTICAL® 803 in combination with an ULTRAFLOW® 54/44 or an ULTRAFLOW® 85.

1. In MeterToolX, tap **Installation Validation** in the main menu. Then select either **ULTRAFLOW® 85 Installation report** or **ULTRAFLOW® 54/44 installation validation** depending on the installed flow sensor:



MeterToolX now guides you through a series of checks to ensure that the ULTRAFLOW® has been correctly installed in the system:







Once the validation has finished, a report is generated that can be shared:

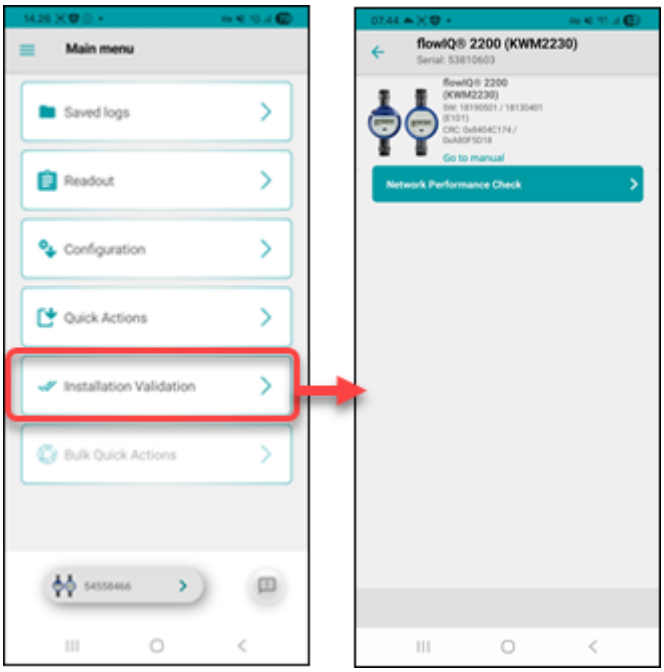


## 6.2 How to check the network performance of a LoRaWAN or NB-IoT water meter

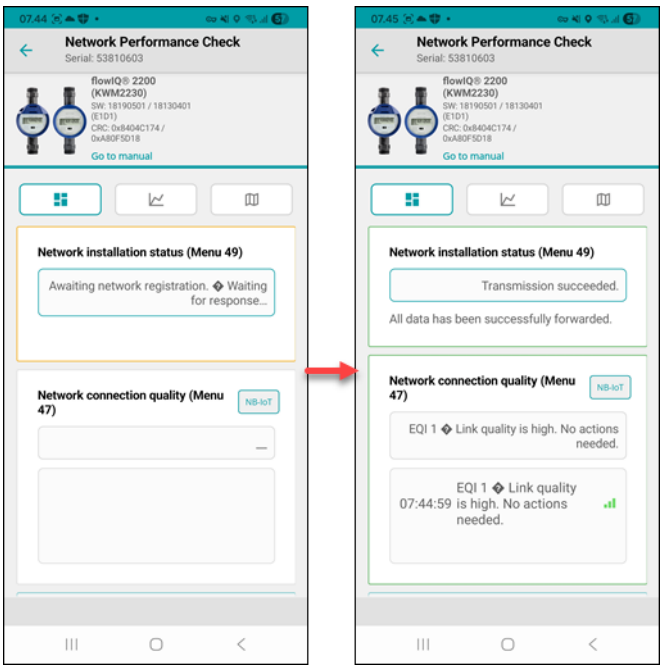
For flowIQ® 2200/3200 meters with LoRaWAN OMS or NB-IoT, you can perform a network performance check.

The network performance check evaluates the installation status and connection quality. Use the results to verify the quality of the installation and to determine whether an additional antenna is required.

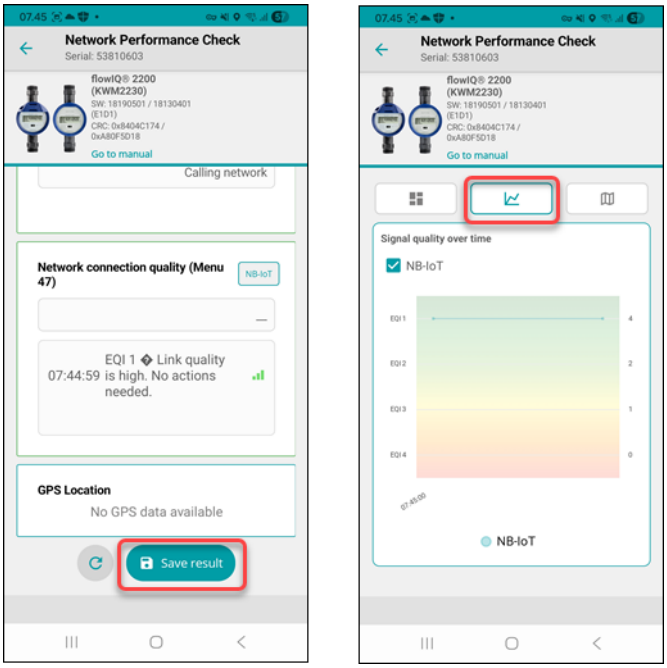
1. Tap **Installation validation** in the main menu. Then select **Network Performance Check**:



The network performance check is not in session. The installation status is checked, and if a call is successful, the network connection quality is then assessed:



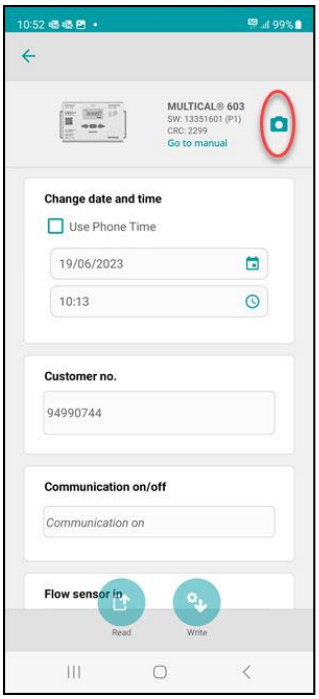

After the network performance check is complete, you can save the results and access them in **Saved Logs**. You can also view network performance over time:

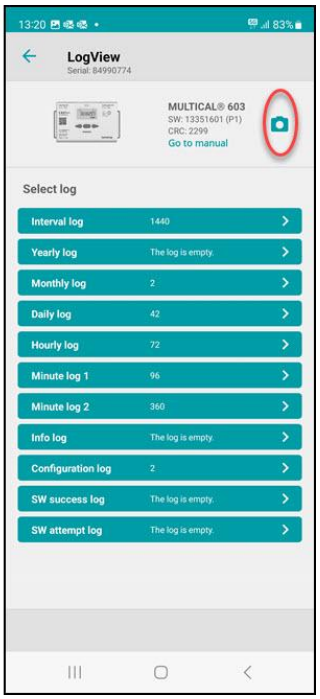


# 7. How to take a snapshot of your meter installation

If you want to document a new meter installation or otherwise want a picture of the installation, you can take a snapshot and add it to your meter in MeterToolX. Pictures can be added when you share a log reading by email (see section 4.4 “How to share a log file by email”):

2. In MeterToolX, tap **LogView** or **Configuration** in the main menu.
3. Select a log reading or configuration in the list that appears.
4. Tap the camera icon at the top of the screen:




5. Take the snapshot:




6. Tap **OK** if you are satisfied with the picture.



An image icon now appears on the log/configuration readings with a picture. Tap the image icon to see the picture:

