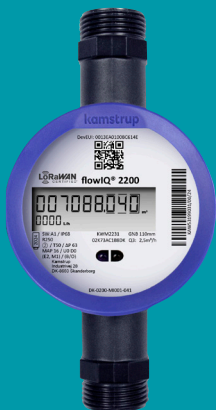


# kamstrup

## flowIQ® 2200 LoRaWAN



KamstrupA/S-55123445\_B4\_EN\_09.2024



## Installation steps



Information

1



Radio activation

2



LoRaWAN network performance

3



Network performance check

4



## Information

1.1



The meter has different display menus, and menu activation is done by using a magnet. The magnet could be the optical IR interface head.



It is important to make sure that the meter is installed with the best possible radio performance to achieve maximum battery lifetime of the meter. If the meter is installed in poor radio conditions, the meter battery lifetime is reduced.



There are 2 ways to activate the meter radio:

**1** Activation with water flow

**2** Activation with in-display menu



## Radio activation with water flow

2.1



Meter radio activation with water flow



Display with no flow



## Radio activation with water flow

2.2



When water runs through the meter, the radio automatically turns ON.



Afterwards, the meter automatically tries to join the LoRaWAN network and perform a link check. This normally takes between 15 and 45 seconds. The meter writes **"done"** in the lower left corner when the connection is successful.

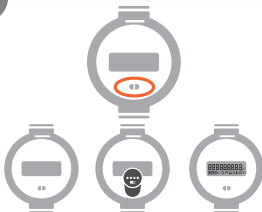


If **"done"** is not written in the display, see "Network performance check".



## Radio activation with in-display menu

2.3



1 - 2 - 3 sec

Activate the menu by holding a magnet over the meter's "optical IR interface" for 3 seconds. When activated, all the segments in the display are shown.



## Radio activation with in-display menu

2.4



Navigate to **"dont CALL"** by placing the magnet on the meter's optical readout interface for 1 second. **"dont CALL"** starts flashing after 5 seconds.



1 second

Activate **"do CALL"** by placing the magnet over the optical readout interface for 1 second.



1 second



## Radio activation with in-display menu

2.5



The meter returns to the legal volume display and performs a network call.

This normally takes between 15 and 45 seconds.



The meter shows **"done"** in the lower left corner when the connection is successful.



## Network performance check

3.1



During meter commissioning, it is important to do a network performance check by following these steps:

If the meter display does not write **"done"** in the display during commissioning: Check the communication status in the in-display menu **"no49"**.





## Network performance check

3.2



Typical status codes during installation:

- 0: Meter is installed successfully
- 1: Awaiting to join to network
- 2: Awaiting to install on network
- 3: Awaiting to join while transmitting fallback frames.



## Network performance check

3.3



The last two digits show the quality of the connection.

If the last digit is below 10, an external antenna should be considered.

- 0: No valid link
- 1-9: Poor link
- 10-19: Medium link
- $\geq 20$ : Good link





It is possible to check the meter's network performance in the meter display. Kamstrup recommends to always check the meter link performance and to make sure that the performance is at least medium.



It is important to make sure that the meter is installed with the best possible radio performance, to achieve maximum battery lifetime of the meter. If the meter is installed in poor link conditions, e.g. in a meter well, a network performance status check is recommended.

[www.kamstrup.com](http://www.kamstrup.com)