

Quick Guide Installation Steps

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Think forward



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1.1 Important information before installation

- Only installers are approved to perform installation
- Further information on kamstrup.com
- Further information on products.kamstrup.com

1.2 Important information before installation

- Permitted water temperature: 33 °F...140 °F
- Maximum operating pressure: 250 PSI
- Fixed installation with min. vibration. Electromagnetic environmental class: Residential and commercial

1.3 Important information before installation

- 35 °F...140 °F
- Condensing humidity permitted. (Indoors mounted in utility rooms and outdoors in meter pits). Installation in direct sun and freezing conditions must be avoided
- IP68-rated (waterproof-submersible)

1.4 Important information before installation

- The meter can be installed indoors, in a pit or under water, but direct sun should be avoided. Increased ambient temperature can adversely affect battery life

2.1 Ensure correct piping during installation

- Correct meter placement in installation
- Connect the correct pipes parallel to the meter!

2.2 Ensure correct pressure during operation

- The Meter is filled with water during operation: ≥ 5 PSI
- Water pressure too low: < 5 PSI
- Avoid entrained air in the water flow: Air

2.3 Replace gaskets when installing new meter

2.4 Important! Be aware of maximum torque

Maximum torque for 3/4": 11 ft-lb

Maximum torque for 1": 22 ft-lb

2.5 Install meter in the correct direction of flow

Correct direction

Wrong direction

3 Info codes and display

Display for flowIQ® 2100

Info code	Meaning
LEAK	Possible leak
BURST	Possible broken pipe
TAMPER	Attempt of fraud
DRY	Meter is missing water
REVERSE	The water flows in reverse direction
RADIO OFF*	The meter is still in transport mode
■ (SQUARE 'DOT')	Flashing square means active meter

* RF version only

4.1 Check the installation

Installation is complete

Make sure the meter displays **DRY** and the desired unit of measurement

Open the water supply

4.2 Check the installation

Check that the display switches to **FLOW** and that the counter is in movement

Current display status... ...4 sec. later

The first 8 hours the meter operates in Installation Mode. The display will update every 4 seconds during Installation Mode, permitting the installer to confirm that the meter is properly operating. Every time the meter becomes dry and subsequently rewetted, Installation Mode will re-initiate

5.1 Mount the cable for encoded output on meter

Remove cap

Cable through conduit

Mount plug

Mount conduit

Dislodge conduit w/ screwdriver

5.2 Connect with other electronic reading systems

Three Wire

Touch Read

The reading unit must comply with the electrical requirements of the specification for the Sensus protocol UI 1203R20, September 2009. The most important issues:

Type: **Open Drain** On voltage: **< 0.4V @ 3.2mA**
 Max. input voltage: **15V** OFF condition: **R > 6MΩ**
 Max. current sink: **5mA**

Compatibility table				
	Sensus	Neptune	Itron #1	Itron #2
Data	Green	Red	Red	Brown
Ground	Black	Green	White	Grey
Power	Red	Black	Black	Yellow

6 FCC Cautions

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the users authority to operate the equipment.

RF Exposure compliance statement: This device may be used with no restrictions, since the source-based time-averaged output power is $\leq 60/f(\text{GHz}) \text{ mW}$.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interference received, including interference that may cause undesired operation.

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