

**Quick Guide Installation Steps**

- 1 Important information before installation
- 2 Installation
- 3 Info codes and display
- 4 Check the installation
- 5 Encoded Output
- 6 ISED Cautions

**1.1 Important information before installation**

- Only installers are approved to perform installation
- Further information on [kamstrup.com](http://kamstrup.com)
- Further information on [products.kamstrup.com](http://products.kamstrup.com)

**1.2 Important information before installation**

- Permitted water temperature: 0.1 °C...50 °C
- Maximum operating pressure: 275 PSI
- Fixed installation with min. vibration. Electromagnetic environmental class: Residential and commercial

**1.3 Important information before installation**

- 2 °C...55 °C
- IP68-rated (waterproof-submersible)
- Condensing humidity permitted. (Indoors mounted in utility rooms and outdoors in meter pits). Installation in direct sun and freezing conditions must be avoided

**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:  $\geq 5$  PSI
- Water pressure too low:  $< 5$  PSI
- Avoid entrained air in the water flow: Air

Kamstrup Metering Solutions Canada Inc.  
 245 Hembree Park Drive, Ste. 110  
 Roswell, GA 30076, USA  
 T: +1 (404) 835-6716  
 info-us@kamstrup.com

Think forward



Kamstrup A/S - 55122326\_B1\_CA\_01.2019

### 2.3 Replace gaskets when installing new meter

- Remove old gaskets from the meter.
- Remove old gaskets from the pipe.
- Install new gaskets on the meter.
- Install new gaskets on the pipe.

### 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

**\* NOTE:**  
Does not apply to meter type 03U21XXXXXX

### 5.2 Connect with other electronic reading systems

Three Wire

Touch Read

•Data •Ground •Clock

•Data •NA •Clock

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
<b>Data</b>	Green	Red	Red	Brown
<b>Ground</b>	Black	Green	White	Grey
<b>Power</b>	Red	Black	Black	Yellow

### 6 ISED Cautions

**This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:**

- This device may not cause interference; and
- This device must accept any interference, including interference that may cause undesired operation of the device.

**Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:**

- l'appareil ne doit pas produire de brouillage;
- l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

www.kamstrup.com