

Sigfox for smart water metering



Proven metering technology meets next-gen communication technology

A water utility's smart water metering journey is paved with many possible communication options. One of them is the Internet of Things (IoT).

What is unique about buying a water meter with Sigfox or NB-IoT communication, is that the infrastructure you use to remote read your meters is already rolled out, operated and maintained by a network provider.

Within smart water metering, Sigfox is the most mature and widespread IoT technology with coverage in many parts of the world and new networks continuously being implemented.

About Sigfox

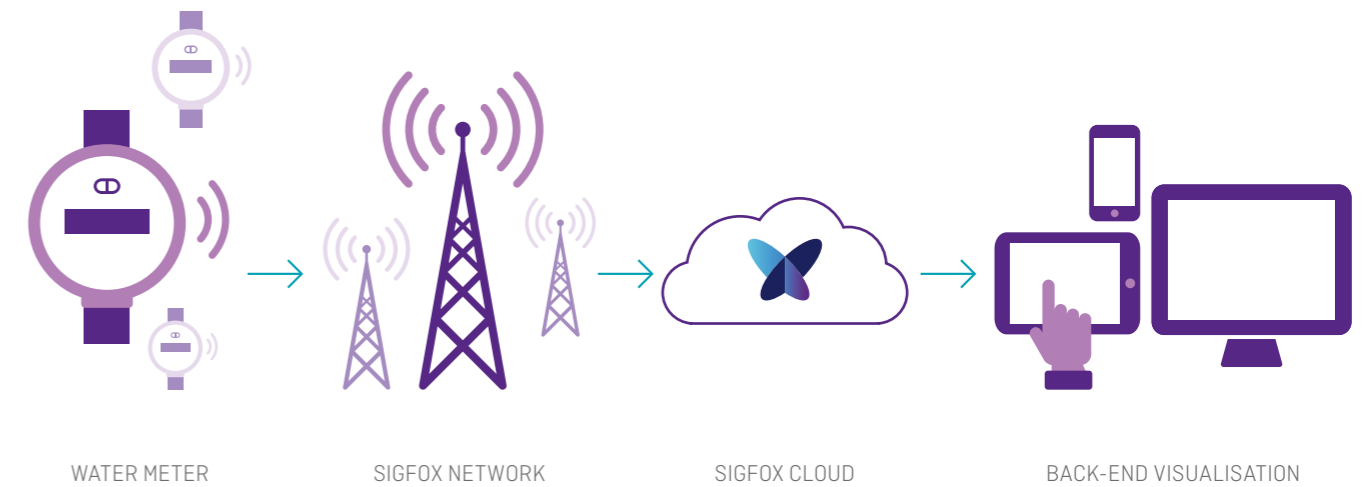
Sigfox is an IoT technology owned by Sigfox who builds and owns the communication infrastructure. They cooperate with a number of local Sigfox Operators (SOs) who are responsible for the network performance, maintenance and daily operations.

Therefore, you cannot build your own Sigfox network. Instead, you pay your local SO an annual fee for using the existing network to read your meters.

Instead of transmitting data from the meters to a fixed network optimised for smart metering through the M-Bus protocol, Sigfox enables all kinds of devices, including smart meters, to be connected using ultra-narrow band (UNB) technology.

How to get started

In order to read your meters through the Sigfox network, the local SO needs relevant information about your water meters and the integrated Sigfox radio for identification. This information is delivered together with the meter from Kamstrup.



What do you get with a Sigfox-based solution

With a Sigfox-Ready® Kamstrup meter, you have a number of options for data collection including different combinations.

A Sigfox solution includes one or several devices, a communication infrastructure and cloud application, a back-end visualisation – and a Sigfox subscription.

Kamstrup water meters

Our MULTICAL® 21 and flowIQ® 3100 water meters are available with Sigfox communication.

They deliver the same pinpoint accuracy, longevity, intelligent features and alarms as our other meters, but a Sigfox radio is integrated into the meter instead of e.g. a Wireless M-Bus radio and sends out a different data package.

In addition to what is already imbedded in Sigfox, Kamstrup adds another layer of security in our meters: individual encryption keys for every single device, accessible only for our customers through our online portal, My Kamstrup.

Sigfox infrastructure

The Sigfox Operator (SO) in your country is responsible for the entire infrastructure – i.e. the antenna base stations and the cloud into which the data is sent.

This means that in order to be able to read your water meters, you pay an annual subscription fee to the local SO.

Back-end visualisation

The data from your meters must be retrieved from the Sigfox cloud with an API and visualised through a back-end solution. The back-end can be supplied by a third party or developed on your own.

Is Sigfox for you?



It could be, if:

... you only need data for billing and are looking for long battery lifetime

With a Kamstrup Sigfox meter, you have a number of options for data collection including different combinations of modules and data packages. If you only need daily values with less data – for example for billing and basic data analytics only – the Sigfox meter can still deliver a lifetime of up to 16 years.

lifetime of up to
16 years

... you do not want to invest in, or own, your own infrastructure

In a Sigfox-based solution, the infrastructure is owned and operated by industry experts. You avoid the investment required to build your own smart metering network, which often makes the start-up of remote reading cheaper compared to a traditional AMI system.

dedicate your time
and effort to your
core business

Also, you are able to dedicate your time and effort to your core business – but depend on your Sigfox partner to ensure that your needs are met in terms of coverage and network optimisation.

... your distribution network area contains rural areas

The Sigfox network is characterised by offering excellent coverage carrying the small amounts of data over very long distances such as rural areas.

Here, the density of the base stations in a Sigfox network is based on a range up-to 30-50 km, while the range is between 3 and 10 km in urban areas where there are usually more obstructions and noise.

range up-to
30-50 km

... you need to communicate with other smart devices

Sigfox also enables other smart devices to connect using the ultra-narrow band (UNB) technology. For you this means that you can use the Sigfox network to send or receive data from compatible devices. This could for example be smart valves enabling you to remote control the water flow.

send or receive
data from
compatible devices

Think forward

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