NB-IoT in-line Smart Water Metering
Flexible solution with extensive coverage

Citycare Water, in partnership with Spark IoT, provides an end-to-end smart water metering solution utilising communication via cellular networks. With both new smart water meters and devices that add the same functionality to existing water meters, we have solutions for every water network. Hourly water usage data is transmitted through Citycare Water middleware to your choice of either a Citycare Water or other monitoring dashboard, with alert notifications.
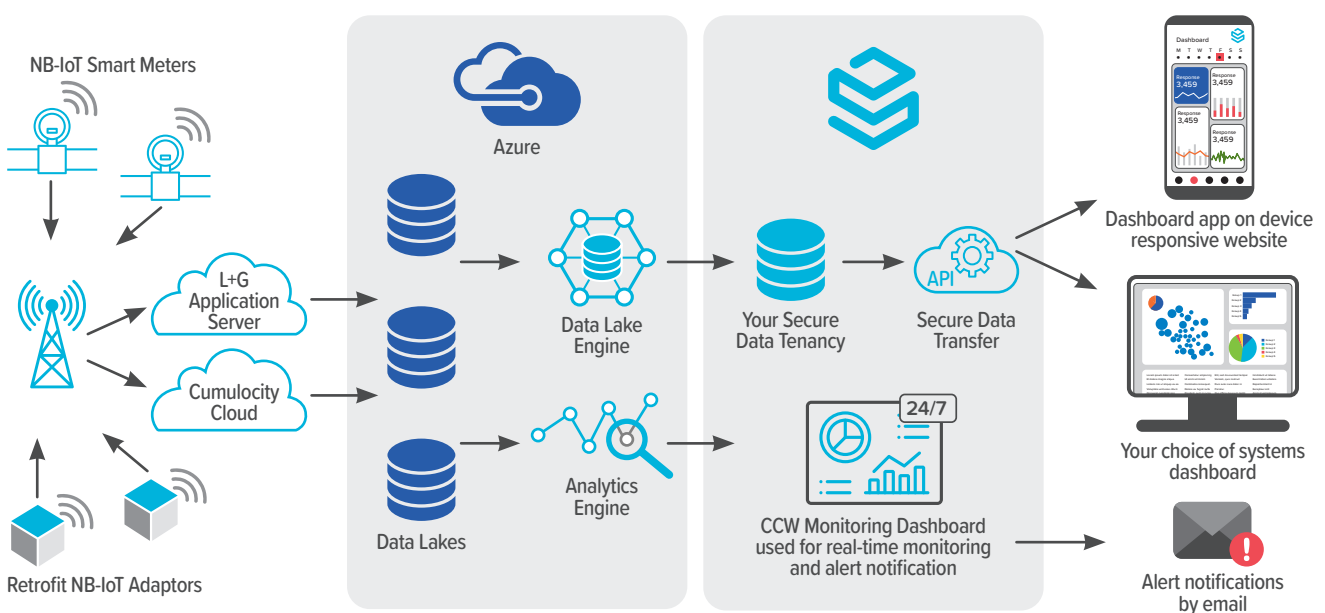
Why install smart water meters?

Smart water metering offers significant benefits for water providers and consumers, including:

- **Leak detection** - reducing water waste and preventing potential damage.
- **Water management** - data to manage water resources more effectively, plan for future demand, and implement conservation initiatives.
- **Accurate billing** - using accurate and timely water usage data.
- **Automated readings** - eliminating the need for manual meter readings.
- **Water conservation** - informed consumers can reduce water consumption.

Why use NB-IoT?

- **Extensive coverage** - installed network covers 98+% of NZ properties.
- **Highly deployable & scalable** - easy to add new devices.
- **Long battery life** - due to low power consumption.
- **Reliable data transmission** - from cellular infrastructure.
- **Software upgrades** - available over-the-air.

NB-IoT in-line Smart Metering as-a-Service

NB-IoT Smart Meters

Retrofit NB-IoT Adaptors

L+G Application Server

Cumulocity Cloud

Azure

Data Lakes

Data Lake Engine

Analytics Engine

Your Secure Data Tenancy

Secure Data Transfer
API

Dashboard
24/7

CCW Monitoring Dashboard used for real-time monitoring and alert notification

Dashboard app on device responsive website

Your choice of systems dashboard

Alert notifications by email

Landis+Gyr Smart Water Meters

Landis+Gyr provides proven smart water metering technology with over 100,000 meters deployed across Australia and New Zealand.

Ultrasonic water meters from Landis+Gyr are highly accurate, have no moving parts and low power consumption. These meters also provide the following features:

- Daily delivery of flow data, flow rate, temperature, pressure.
- Multiple alarms: burst, tamper, empty pipe, leakage, low battery, pressure, temperature, reverse flow.
- Network leak detection to help water utilities manage network losses, leaks and accurate billing – integrated in W350, optional in W370.
- Network lifetime guaranteed for up to 15 years.

L+G W350

- For residential & small business
- Options with pressure and/or vibration sensors

L+G W370

- For residential & small business
- Green Design Principles to meet utilities' sustainability
- 15+ years battery lifetime

Retrofit For Existing Mechanical Water Meters

Get smart water metering functionality by connecting installed mechanical water meters to the NB-IoT network using a pulse adapter and a Captis device from Kallipr.

Solutions available for many common mechanical meters, including:

- Sensus 620

Sensus pulse adapter

- Attaches to Sensus 620 mechanical meter
- Converts meter dial movement to electrical pulses

Kallipr Captis S2

- Long battery life
- Simple in-field battery swap
- NB-IoT & LTE/M connectivity
- Best-in-class security

Citycare Water