

Commercial Water Metering



Major Water Utility Reduces Non-Revenue Water Leakage

The Need

A major Australian water utility based in New South Wales supplies over 1.5 billion litres of drinking water to over 5.3 million people across residential and commercial premises every day.

With such a sizeable network, the water utility required a scalable, yet cost effective solution to monitor commercial water usage, accurately detect leaks and reduce non-revenue water.

The water utility sought to segment their distribution network into District Metering Areas (DMA) and measure water supply against customer water usage.

Every year the utility saw up to 9% non-revenue water due to leaks. They needed to implement a smart water solution to help reduce that figure, without interruption to their network during the installation.



100+
LEAKS DETECTED



IMPROVED RESPONSE
TIMES TO LEAKS



REDUCTION IN
MAJOR LEAKS

The Solution

1,000 Captis Pulse Lite were installed across their commercial network to monitor the largest water users. The device was chosen for its ease of installation and ability to support a range of water meters through different sensors.

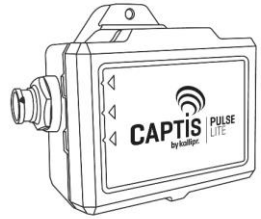
The Captis Pulse was able to digitise readings from mechanical water meters and transform part of the network into a smart water network. It was also able to register if a backflow event occurred, proactively notifying the utility through alarms and reducing the risk of water contamination.

From the data Captis provided, the water utility was able to see gradual increases in water usage over several months and identify leaks. In particular, the water utility identified leaks on large commercial water meters in low population density areas, which if left unresolved, could cost upwards of half a million dollars in non-revenue water per leak.

Through the solution, they were also able to improve response times to major leaks and have also used the data for water education initiatives with their customers.

The results of this project has proven the business case and work is commencing to extend the metering capability to 10,000-30,000 of the largest consuming meters.

Solution & Application



Captis Pulse Lites

1,500+ Captis Pulse Lites were installed across existing infrastructure, with data feeding back every 15 minutes



Captis Device

The cost-effective device was chosen thanks to its long battery life and its ease of installation on existing meters

Remote Access

The NB-IoT cellular technology enabled data to be transmitted from any location easily and reliably



Rugged Hardware

The IP68 rated enclosure can withstand extreme temperatures, weather events and water ingress



Multi Sensor Interface

Chosen for its multi sensor interface that can connect to existing infrastructure such as legacy water meters



Data Logging with Captis Cloud

Data logged in a central hub with pre-defined rules and alarms to ensure real-time data and accuracy