



PRESSURE & FLOW METERING

SITE MONITORING FOR DISTRICT METERED AREAS (DMAS)



THE CHALLENGE

City West Water was trialling digital metering for its District Metered Areas (DMAs). It established a DMA at Melbourne's Docklands Park and wanted to monitor flow and pressure rates.

Site monitoring within such an urban area is challenging. Below-ground monitoring, which would be almost invisible to the public, presents greater difficulty in achieving good quality wireless communication. Additionally, the costs and logistics of opening pits below ground to maintain monitoring equipment are high and complex, particularly within DMA environments.

SAGE Automation were subsequently engaged by City West Water to come up with a suitable monitoring solution.



SOLUTION: POINT ORANGE

The above-ground monitoring solution, put together as a collaboration between City West Water, SAGE Automation, Melbourne City Council, and Yarra Trams ultimately comprised a bollard containing the monitoring equipment, as it had minimal impact on aesthetics or public safety. The aim was to blend with the environment and perform the role at a low implementation and lifetime cost.

Metasphere's Point Orange remote telemetry data-logger was brought into the bollard as a key part of the system, along with an additional battery and flow transmitter, with an external antenna on top. It is fully integrated with City West Water's SCADA system.



OUTCOME

City West Water can now monitor flow and pressure rates for three below-ground sites at Docklands Park, using a highly accessible and discrete bollard solution. This has provided the water authority with another means to monitor its diverse range of assets and services. It will continue to roll out similar solutions within its DMAs where suitable.

The Solution:

- is highly accessible
- has reduced lifetime service costs
- conforms to safe, attractive urban design
- is an energy-efficient, battery-powered solution
- provides high-quality wireless communication

Technologies:

- Metasphere Point Orange low-powered battery operated DNP3 RTU-Datalogger
- Krohne flow/pressure meter with Modbus support
- 3G or 4G / LTE NB-IoT
- Custom bollard
- Schneider ClearSCADA master system



METASPHERE REMOTE TELEMETRY SERVICES

Metasphere employs the power of telemetry to drive sustainable use of the world's scarce resources by providing robust and reliable remote telemetry solutions to clients globally in the water, wastewater, environment and gas market sectors. The company's products and services include the popular Point Colour range of RTUs, and Palette, a web-based cloud service for information for interoperability and optimisation in wide area network control.

FIND OUT MORE!

If you would like to monitor pressure and flow, get in touch to find out how Point Colour RTU devices can transform your network:



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