CASE STUDY Flow Meters & Data Logging







BACKGROUND

Pacific Technologies was contacted by ASPA to provide a solution to measure and monitor the flow rates and volume flow through the wastewater line at their Lift Stations. This allows ASPA to determine if the pump is running optimally (at rated capacity in GPM) for each Lift Station and to them build a model for their I&I (Inflow and Infiltration).

For this, Pacific Technologies solution was to install and commission 16 x Optiflux 2050 flowmeters and Point Orange RTU's for each site that communicates with a cloud-based SCADA system for remote access. Along with installation and commissioning, Pacific Technologies provided training to ASPA on all three products:

- Optiflux 2050
- Point Orange
- Palette

as a part of our aim to leave our clients in a position to understand, operate, troubleshoot and maintain the units.





STAKEHOLDER

American Samoa Power Authority (ASPA) is a development-oriented public utility providing electricity, water, wastewater and solid waste service to over 60,000 residents of American Samoa. ASPA install, operate and maintain American Samoa's public utility infrastructure and offer our customers the highest quality services at affordable rates.



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THE PACIFIC TECHNOLOGIES SOLUTION

The KROHNE OPTIFLUX was selected because of its range of sizes and for all water and wastewater applications with conductive liquids. Other key features are highlighted below:

- Bi-directional flow measurement over a wide dynamic range
- Tropicalized electronics for use in areas with extreme humidity and chances of flooding
- Standard wet calibration
- PP or hard rubber liner: excellent chemical resistance
- Stainless Steel Body and Flanges, complete IP68 Construction
- Tamper Proof
- Full Bore Design: No moving parts, no wear, no pressure loss

Metasphere has been at the forefront of the remote monitoring and control business for over thirty years. We improve operational efficiency and reduce costs, enabling our customers to meet their regulatory reporting requirements. Our customers are at the heart of everything we do and we implement some of the most innovative solutions available on the market.

Point Orange is a self-contained RTU with an internal or external battery pack, IP68 unit enclosure, either a 4G (NB-IoT/ CaT-M1) or tri-band 3G modem, and quad band GSM/GPRS fallback, auto-switching internal and external antenna options, software configurable AI, CI, DI, Modbus and SDI-12 communication options, integrated submersion sensor, local diagnostic points and intelligent alarm reporting. It communicates with **Metasphere's** Master Control System, DNP3/ WITS DNP3 Masters or FTPS servers.

The variables can be logged and stored with time-stamps at periodic intervals. The **Point Orange** RTU is also configured to trend diagnostic information from internal points, such as temperature, battery voltage and signal strength. Once critical levels are reached the RTU's is alarmed to dial in to allow the Utility to take action before an overflow.

The data collected is then communicated to **Palette**, **Metasphere's** data-visualisation platform. The platform selected was **Palette** for near real-time data and alarm visualisation and management.



FIND OUT MORE

If you would like to monitor your water and wastewater networks, get in touch to find out how Point Colour RTU's can transform your operation.

CONTACT DETAILS

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