

# Aquila-2s Water Monitoring System

## Overview

Hevasure's Aquila® range of real-time water monitoring systems protect closed loop heating and chilled water systems from corrosion damage by continuously monitoring the conditions that cause corrosion. The early detection of adverse conditions in a system means that rectification and maintenance activities can be scheduled before any significant damage occurs to the system.

The Aquila-2s® model has been specifically developed for secure environments where 'cloud' and internet communication is forbidden. Instead, all data processing is done locally and data, alarms and messaging is made available to a BMS via a BACnet interface. A local interactive touch-screen display enables users to view real-time data and change configurations. Real-time monitoring is applicable throughout the life of a system, from pre-commissioning cleaning, through to day-to-day operation and maintenance.

Key data is monitored and captured on the parameters that influence corrosion as well as any presence of corrosion. Hevasure's Aquila technology can act as an independent 'eyes and ears' on commissioning, helping ensure smooth hand-over at Practical Completion and throughout the operational life of a closed-loop heating and chilled water system, where all data is recorded and no adverse event is missed.

The fully integrated monitoring station is simple to install requiring only mains power, connection into the flow and return pipework, and an ethernet link to the building LAN. Configuration will be required to the BMS display. It can be fitted to new systems or retrofitted to existing ones.



### What We Monitor

- Dissolved Oxygen
- Pressure
- Temperature
- Conductivity (converted to inhibitor dosing level)
- pH
- Water make-up volumes
- Galvanic currents (converted to general corrosion rate of steel)
- Crevice corrosion (steel and copper)
- Cumulative measures over given time period

### How We Monitor

- Data captured every 2 minutes, 24x7
- Internal processing determines if critical levels are exceeded, triggering alarms and intelligent messaging
- BACnet interface enables integration with a BMS

### Benefits

- Reduces unplanned downtime due to corrosion
- Provides reassurance that systems are maintained and operating in peak condition
- Helps ensure systems do not degrade thereby saving energy and reducing carbon footprint
- Provides hard-data during PCC (supporting BG 29) and over lifetime of system (supporting BG 50)
- Reduces need for sampling and routine site visits
- Helps prevent over-dosing with chemicals

### Technical data

- Max operating temperature: 82 °C
- Maximum System Pressure: 10 Bar
- Suitable for use with inhibited water or glycol
- Mains AC power required (110 V / 230 V)
- BACnet standard interface via ethernet connection
- Local touch-screen display

