

KEY FEATURES

- Access the distribution network at any point via a 6mm hose connection enabling rapid deployment and recovery
- Measurement of turbidity, chlorine, conductivity, pressure and temperature all in one device
- High resolution turbidity sensor designed specifically for potable water
- Patented flushing control to ensure water from the main is sampled
- Ability to switch external devices against control levels
- Bi-directional 4G cellular communications for remote configuration, data upload and alarming
- Bluetooth mobile app for local set up, control and data collection
- Robust IP68 enclosure
- Powerful Clamnet Portal data management and visualisation
- SCADA data integration either via our API or directly, bypassing cloud storage
- A cornerstone for water quality Smart Networks



CLAMNET

The Hydraclam is part of the Clamnet system of sensors, telemetered data loggers, mobile app and web data portal. Developed originally to remotely monitor water quality parameters in the potable water distribution network, the system has been extended to cover open water and wastewater monitoring. A wide range of third party modbus sensors can be added to the system via the inbuilt RS485 comms.

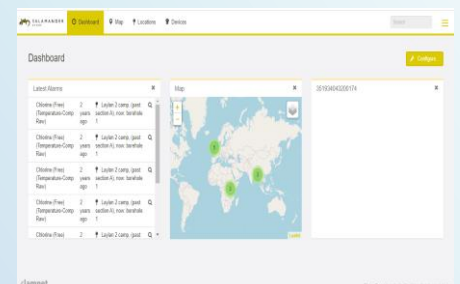
HYDRACLAM v4

The Hydraclam v4 represents a comprehensive redesign of the device, which now incorporates the Clam RTU functions, all original Hydraclam sensors and the chlorine sensor. The battery capacity has been trebled to increase change intervals and to allow powering of additional external sensors if required. The unique and patented flushing control is important to ensure that turbidity data is a true reflection of the water in the main at that time.

The Hydraclam can be used at any access point in watermains network to continually monitor and report turbidity, chlorine, conductivity, temperature and pressure data. Used alone, or in conjunction with other sensors attached, the Hydraclam is an ideal component of any Smart Network for drinking water quality. The bidirectional communications allow firmware upgrades, configuration changes and remote diagnostics as well as routine data uploads to the Clamnet Portal and instant alarming.

CLAMNET PORTAL

Data from the Hydraclam is stored and viewed on the very secure Clamnet Portal. With flexible device management and visualisation tools the portal can manage large Clam fleets. Data can be transferred via our freely available API for incorporation into corporate SCADA systems.



Also available from Salamander: Clam RTU, Chloroclam, DPBclam, Gasclam

TECHNICAL SPECIFICATION

TURBIDITY SENSOR

Measurement method	Nephelometric
Range	0.1 - 10 NTU
Accuracy	± 5% of reading or ± 0.1 NTU
Resolution	0.05 NTU

CONDUCTIVITY SENSOR

Measurement method	4 pole
Range	20 – 3500 µs
Accuracy	± 2% of range
Resolution	1 µs

PRESSURE SENSOR

Measurement method	Silicon micro machined element
Range	0 – 10 bar Absolute
Accuracy	± 1.25% of full scale
Resolution	0.1 bar

CALIBRATION

Factory calibrated using standards at 1 and 10 NTU
No in-service calibration required

INTERNAL POWER

6 x LSH20 3.6V High Discharge Lithium Ion Battery

DATA MEMORY

Up to 50,000 data points within the device
Programmable between 1 minute and 1 hour

DATA STORAGE

Secure web portal on AWS, data can be extracted via API

ENVIRONMENTAL

Waterproofing	IP68
Operating Temperature	0 - 40 °C
Storage	-5 to +65 °C
Mains Pressure	1 - 10 bar
Sample Flow	6 l/sample

COMMUNICATIONS

Cellular data	4G network
Modem	4G Internal antenna, external option

EMC

Hydraclam	BS EN 61326-1:2006
	EN 301 489-1 v1.8.1
	EN 301 489-7 v 1.3.1

SERVICE INTERVAL

Clean sensor head	Recommended every 6 months but will be dependent on operating conditions
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PHYSICAL

Weight	1.5 kg approx.
Dimensions	Max 210 x 210 x 180mm (H,W,D)

OPTIONAL SENSOR INPUTS

Chlorine	Free or Total
Flow	4 – 20 mA. 0 - 10 V or pulse
pH	
Redox	

