intellitectwater

Intellisonde SA

Water Quality Monitor for short term deployment at or near Consumer Premises - No chemicals or membranes!

The Intellisonde SA monitors up to 12 water quality parameters in one integral device which can easily be fitted into a Consumer MSM Chamber/Boundary Box (other domestic meter installation versions available on request).

Using our unique patented sensor platform, the sensors are more robust than traditional technologies and require no reagents.

An integral stirrer maintains flow around the sensors, eliminating flow to waste.

Operational costs are less than chemical alternatives.

Compact and light weight in construction, it is easy to install in a boundary box when a water meter is removed.

Easy to Install

The sensor head is mounted in a plastic manifold allowing the water to pass over the sensors. The water company will remove an existing water meter from the boundary box and the SA is temporarily fitted in its place via a 1.5" BSP fitting.

A battery pack is connected to the enclosure.

Sensor Performance

The chlorine, Mono-chloramines and Dissolved Oxygen Sensors use microelectrode technology for maximum life.

The sensors are membrane free and insensitive to pressure and flow. They have a fast response, typically <20seconds, 95% of step change.

Dimensions and Weight

- 30cm total height
- 3.5Kg approx



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Power Requirements

Battery Pack 12v (8C Cells)

The Benefits

- The Intellisonde SA facilitates a pro-active approach for investigating water quality customer complaints at the consumer's premises.
- It will assist with the monitoring of water quality problems at the back end of the distribution networks (e.g. sampling surveys).
- It will assist with investigations for rehabilitation of water pipes.
- It will provide the means to perform cyclic reviews for asset planning and renewal, risk assessments and incident reports.

12 Parameters Monitored

Physical:

• Flow

- Optical: • Turbidity
- Pressure
- Colour
- Temperature

Chemical:

- Free Chlorine
- Total Chlorine
- Dissolved Oxygen
- Conductivity
- pH
- ORP (REDOX)
- ISE (e.g. Fluoride)
- Spare port.

Communication Interfaces Supported

- RS232
- GPRS (available (Sept 08)
- Modbus
- Ethernet
- GPS (asset tracking)

Data Logging

- Twelve parameters logged every 15 minutes for up to 1 month.
- Values measured and logged at intervals from 1/minute to 1 hour.
- Option to log average values over 24 hours.
- Alarm settings for each parameter and transmitted in real time (via GPRS)

Intellisonde Specification

Parameter	Performance
Flow (forward and reverse)	0 to 2 m/sec ±10%
Temperature	-5 to +50°C ± 0.2°C
Colour	0 to 50 Hazen ± 1 Hazen
pH (Glass)	2 to $12pH \pm 0.2pH$ in typical installations
Dissolved Oxygen	0 to 20 mg/l ± 10%
ISE	0 to 1 volt \pm 1 mV
Free Chlorine	0 to 5 mg/l ±10% or ± 0.5 mg/l
Pressure (standard)	0 to 10 Bar
Turbidity	0 to 50 NTU \pm 0.5 NTU
Conductivity	0 to 10 mS/cm ± 5%
ORP	+1.0 volt to -1.0 volt ± 1mV
Total Chlorine	0 to 5 mg/l ±10% or 0.5 mg/l



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