OzoSense

Residual Ozone Analyser

The OzoSense range of Ozone Analysers, Ozone Controllers and Ozone Monitors utilise the very latest and best ozone sensors available in the world today. The OzoSense sensors are membraned devices which are insensitive to changing pH, use no reagents, and are extremely stable, and have reduced maintenance and reduced whole life costs.

- Stable and reliable excellent process control
- Suitable for all potable and process waters
- Up to 6 months between maintenance
- Up to 3 months between calibration
- Does not respond to residual chlorine



"We have had excellent success with Pi's Ozone Analysers"

Kahraman Kalyoncu, Turkey

The OzoSense sensors and flow cells are available with different controllers giving you the same great performance with different communication, display, and control options. With the OzoSense range of residual ozone analysers, you get everything that you need - and nothing that you don't, saving money without compromising the quality of measurement.

CRONOS® OzoSense



- High Quality Lowest Cost
- Multilingual
- High resolution grayscale display
- 9 buttons for easy navigation
- Graphing and datalogging
- Enclosure; wall, panel, pipe or pole mounting. IP65/Nema 4x.
- Options:
 - Modbus RS485/LAN
 - Profibus DPV 1
 - Up to 2 sensors
 - PID/flow proportional controls
 - Remote sensors
 - Colour display
 - Downloadable data logs

CRIUS®4.0 OzoSense



- High Quality Lowest Cost
- Multilingual
- High resolution colour display
- Intuitive user interface
- Downloadable data logs
- Customisable home pages
- All CRONOS® options plus:
 - Up to 4 sensors
 - Remote access via LAN
 - Remote access via 3G/4G
 - Expandable to 16 sensors

For more information please see the individual brochures

Mounting Options



- Open overflow cell (single, double or triple)



- Single closed flow cell



- Single or double **Autoflush**







Principle of Operation

The membraned amperometric ozone sensor is a two electrode sensor which operates at an elevated applied potential which in turn eliminates zero drift. Its unique design means that no reagents or buffers are required at all.

In addition to the state of the art amperometric ozone sensors the OzoSense range of ozone analysers has all the functionality that you need, and more. Simply choose the CRONOS® or CRIUS®4.0 controller to give you the highest quality ozone monitor, with all the functionality you need, at the lowest price possible. This means that you pay for everything that you need and nothing you don't, without sacrificing the quality of measurement.

Autoflush

As described in a separate <u>brochure</u>, the OzoSense can come equipped to automatically clean itself at user defined intervals with all the benefits of no operator intervention. The Autoflush for OzoSense is particularly useful in food preparation, pulp and paper, and many applications where there is likely to be a build up of solids in the sample.

Multi-Sensor Systems

The whole range of OzoSense Ozone Monitors and Controllers can be fitted with additional sensors such as more ozone sensors, conductivity, pH and many others. Please ask your local distributor for more details.

Water Treatment

- O₃ Dosing Control
- Cooling Towers
- Hospitals
- Remote Sites
- Food Preparation
- Secondary Ozonation

Anywhere you have a requirement to measure residual ozone is a suitable application for the OzoSense. The OzoSense ozone monitor range is particularly suited to working in sites where reliability and ease of use are most important. The OzoSense is resistant to the presence of tensides making it suitable for use in many washing applications.

Installation

OzoSense

in a single

open flow

The OzoSense can be installed in a variety of auxiliary flow cells and self-cleaning devices. Please visit our website or refer to our <u>ISB36 Autoflush</u> brochure.



OzoSense in a closed flow cell

Specification*

Specification	
Туре:	Membrane covered, amperometric 2 electrode system
Sensor ranges:	0.05-0.2, 0.05-0.5, 0.05-2, 0.05-5, 0.05-10, 0-20 mg/l (ppm)
Resolution:	0.01 mg/l (10 ppb)
Repeatability:	<1%
Stability:	-1% per month (without calibration)
Working Electrode:	Cathode made of gold
Counter Electrode:	Silver/silver halide
Membrane Material:	Micro-porous hydrophilic membrane
Flow Rate:	Approx. 0.5 l/min (min 0.2 l/min)
Temperature Range:	0-45°C
Temperature Compensation:	Automatically, by an integral temperature sensor (temp changes <5°C/h)
pH Range:	pH 2 up to pH 11
Conductivity Range:	>0µS/cm
Permissible Overpressure:	1 Bar
First-polarisation Time:	120mins
Re-polarisation Time:	30mins
Response Time:	T ₉₀ : approx. 50 seconds
Zero Point Adjustment:	Not necessary
Calibration:	Manual using a suitable ozone test kit Every 1 week to 3 months, application dependent
Materials of Construction:	PVC-U, silicone, stainless steel
Dimensions:	Diameter approx. 25mm, length 190mm
Maintenance:	Change of membrane cap: Yearly Electrolyte: Every 3-6 months
Interferences:	Cl_2 , ClO_2 1% sulfuric acid or 1% nitric acid in the water have no influence to the measuring behaviour
Storage:	Frost-protected, dry and without electrolyte no limit. Used membrane caps can not be stored
Housing:	Open flow cell

*All subject to change without notice



