



## Water Quality Analysers



### OzoSense - Residual Ozone Analyzer

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

**Stable and reliable - excellent process control**

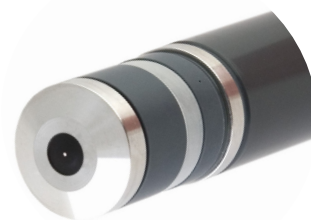
**Suitable for all potable, process and salt waters**

**Up to 6 months between maintenance**

**Up to 3 months between calibration**

**Does not respond to residual chlorine**

**Resistant to detergents in the water**



*"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 analyzers, you get everything that you need - and nothing that you don't, saving money without compromising the quality of measurement.

#### CRONOS OzoSense



- High Quality and Multilingual
- Lowest Purchase Cost
- Up to 3 sensors
- Options include:
  - up to 3 4-20mA outputs
  - up to 4 relays (solid state or mechanical)
  - modbus TCP
  - modbus ASCII/RTU
  - profibus
  - HART
  - flow switch input
  - PID control

#### CRIUS® OzoSense



- High Quality and Multilingual
- Low Cost
- Colour Display and Keypad
- Sophisticated Comms and Control
- All CRONOS options plus:
  - texting alarms
  - remote internet access
  - datalogging
  - automatic cleaning
  - automatic calibration
  - up to 6 sensors and outputs
  - integrated flow control

#### CRATOS OzoSense

Available Mar 2011

- High Quality and Multilingual
- Medium Cost
- Colour Touchscreen
- Up to 12 Sensors
- All CRONOS and CRIUS® options plus:
  - up to 12 sensors
  - lowest cost per point

*For more information on the controllers' capabilities, please see the individual brochure - CRONOS, CRIUS® and CRATOS*

## Principle of Operation

The membraned amperometric ozone sensors are two electrode sensors 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 chlorine dioxide sensors the OzoSense range of ozone analyzers has all the functionality that you need, and more. Simply choose the CRONOS, CRIUS® or CRATOS 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 brochure, the OzoSense can come equipped to automatically clean itself at user defined intervals with all the benefits of no operator intervention for 6 months. The Autoflush 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.

## Water Treatment

- Ozone Dosing Control
- Remote Sites
- Cooling Towers
- Food Preparation
- Hospitals
- 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 sensor is resistant to the presence of tensides making it suitable for use in many washing applications.

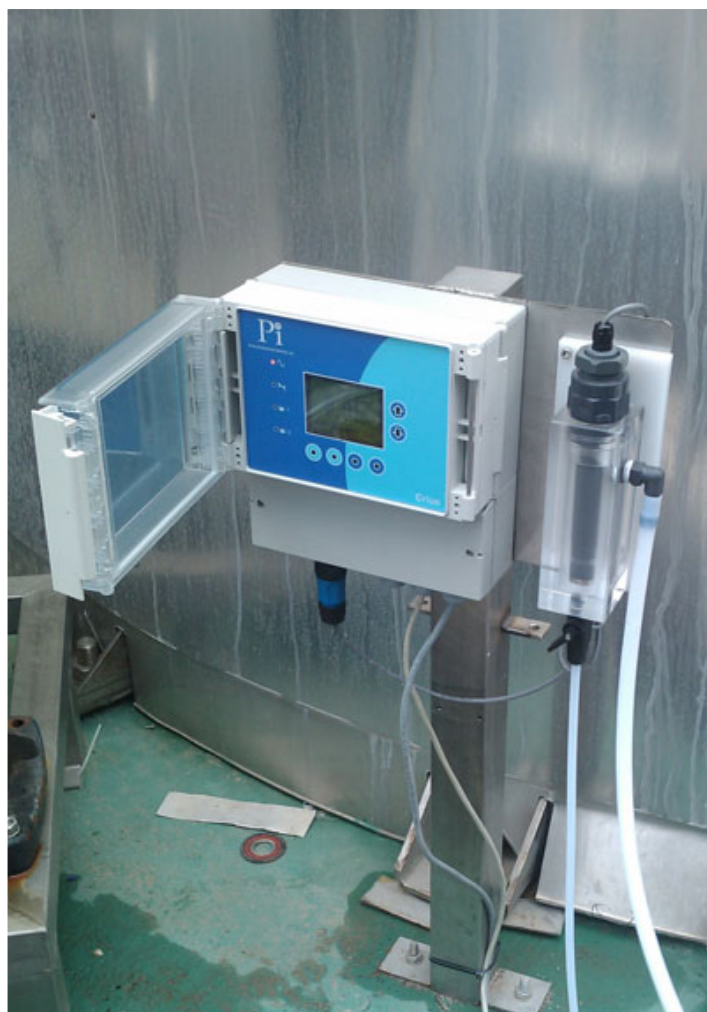
## Multi-Sensor Systems

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

## Specifications

### Ozone Sensor Probe

<b>Type:</b>	Membraned covered amperometric polarographic two-electrode system
<b>Measurand:</b>	Residual Ozone O <sub>3</sub>
<b>Range:</b>	0-1,0-2,0-5,0-10, mg/l(ppm)
<b>Resolution:</b>	0.001mg/l (1 ppb)
<b>Reproducibility:</b>	±5%
<b>Stability:</b>	-1% per month (without calibration)
<b>Working Electrode:</b>	Cathode made of gold
<b>Counter Electrode:</b>	Silver /silver halide
<b>Membrane Material:</b>	Micro-porous hydrophillic membrane
<b>Flow Rate:</b>	Approx 0.5l/min Minimum 0.2l/m
<b>Temperature Range:</b>	>0 up to 40°C
<b>Temperature Comp:</b>	Automatically by an integrated thermistor
<b>pH Range:</b>	pH 4 up to pH 9.5
<b>Permissible Overpressure:</b>	0.5 bar
<b>First-polarisation Time:</b>	120mins
<b>Re-polarisation Time:</b>	30mins
<b>Zero-point Adjustment:</b>	Not Necessary
<b>Calibration:</b>	Manual using a suitable ozone test kit
<b>Housing Material:</b>	PVC, silicone, polycarbonate, stainless steel
<b>Dimensions:</b>	Diameter approx. 25mm, length 175mm
<b>Maintenance intervals:</b>	Membrane: Yearly Electrolyte: Quarterly to six monthly Calibration: Quarterly
<b>Interference:</b>	Cl <sub>2</sub> negligible, ClO <sub>2</sub> 6%



everything you need, and nothing you don't  
find your local supplier at [www.processinstruments.net](http://www.processinstruments.net)

