



# PeraSense

## Peracetic Acid Analyser

The PeraSense range of Peracetic Acid Analysers, Peracetic Acid Controllers and Peracetic Acid Monitors utilise the very latest and best peracetic acid sensors available in the world today. They are membrane devices which use no reagents, are extremely stable, and have reduced maintenance and reduced whole life costs.

- **No chemical reagents - lower cost of ownership**
- **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**
- **Up to 15 years life - reduced costs**



"We can now control PAA in processes where we never could before"

**Anthony Glietto. USA**

The PeraSense sensors and flow cells are available with different controllers giving you the same great performance with different communication, display, and control options. With the PeraSense range of peracetic acid analysers, you get an extremely sophisticated peracetic acid analyser, peracetic acid monitor and peracetic acid controller.

### CRONOS® PeraSense



- 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 PeraSense



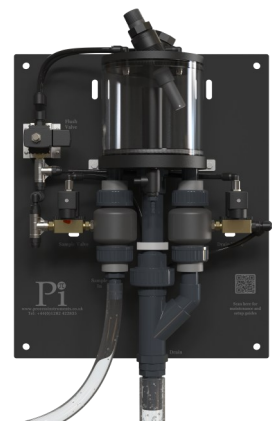
- High Quality - Lowest Cost
- Multilingual
- High resolution colour display
- Intuitive user interface
- Downloadable data logs
- Customisable home pages
- All CRONOS® options plus:
  - **Up to 8 sensors**
  - **Remote access via LAN**
  - **Remote access via 3G/4G**
  - **Expandable to 16 sensors**

**For more information please see the individual brochures for CRONOS® and CRIUS®4.0**

### Mounting Options



- **Flow cell (single, double, or triple)**



- **Single or double Autoflush**

## Principle of Operation

The membraned amperometric peracetic acid 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 and calibration is a single point (no zero required).

In addition to the state of the art amperometric peracetic acid sensor, the PeraSense range of peracetic acid 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 peracetic acid analyser, with all the functionality you need at the lowest price possible. This means that you get everything that you need and pay for nothing you don't, without sacrificing the quality of measurement!

## Water Treatment

- PAA Dosing Control
- Rinsers
- CIP Plants
- Bottle Washers
- Sea Water
- Drinking Water

Anywhere you have a requirement to measure residual  $\text{CH}_3\text{CO}_3\text{H}$  is a suitable application for the PeraSense.

The PeraSense peracetic acid analyser range is particularly suited to working in sites where reliability and ease of use are most important.

## Multi-Sensor Systems

The whole range of PeraSense peracetic acid monitors and controllers can be fitted with additional sensors such as ORP or

pH. Please ask your local distributor for more details.

## AutoFlush

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

For more information about the AutoFlush, please see brochure ISB36 AutoFlush.

## Cost of Ownership

With its reduced maintenance, reduced calibration and reduced spares requirements the PeraSense peracetic acid analysers from Pi are undeniably the most cost effective peracetic acid analysers available.

In most situations the PeraSense analyser is able to control the dosing of  $\text{CH}_3\text{CO}_3\text{H}$  by adjusting flow rates, pump rates, or valve positions automatically to maintain the peracetic acid setpoint. Automatic dosing can significantly reduce reagent costs, and increase the level of control.

## Installation

The PeraSense can be installed in a variety of auxiliary flow cells and self-cleaning devices. Please ask for details.

## Specification\*

<b>Type:</b>	Membrane covered, amperometric two-electrode system
<b>Range:</b>	0.05-20mg/l, 0.5-200mg/l, 5-500mg/l, 5-2000mg/l, 50-5000mg/l, 100-20000mg/l
<b>Resolution:</b>	0.1mg/l, 1mg/l, 10mg/l (ppm) (depending on probe range)
<b>Reproducibility:</b>	<1%
<b>Max. Working Pressure:</b>	0.5 bar, no pressure impulses or vibrations
<b>Flow rate:</b>	Approximately 0.5l/min (min 0.25l/min), small flow rate dependence is given
<b>Temperature range:</b>	0 to 45 °C (no ice crystals in the measuring water)
<b>Temperature compensation:</b>	Automatic by an integrated temperature sensor
<b>pH-range:</b>	pH 1 up to pH 6
<b>First-polarisation time:</b>	Approx. 60-180 min
<b>Re-polarisation time:</b>	Approx. 15 min
<b>Response time:</b>	T <sub>90</sub> : approx.180 seconds
<b>Zero-point adjustment:</b>	Not necessary
<b>Calibration:</b>	At the device, by analytical determination
<b>Housing material:</b>	PVC, stainless steel
<b>Dimensions:</b>	Diameter approx. 25mm, length 190mm
<b>Maintenance intervals:</b>	
<b>Membrane:</b>	12 months (dependent on water quality)
<b>Electrolyte:</b>	3-6 months (dependent on water quality)
<b>Interferences:</b>	Cl <sub>2</sub> does not interfere. O <sub>3</sub> is measured with a sensitivity of 2500 times. ClO <sub>2</sub> is also measured. Hydrogen Peroxide is measured with a sensitivity of 0.005 times. >1% Sulphuric, Nitric or Phosphoric acid

*\*All subject to change without notice*