

Peracetic Acid Sensor

The PeraSense range of Peracetic Acid Analyzers, Peracetic Acid Controllers and Peracetic Acid Monitors utilize 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



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 analyzers, you get an extremely sophisticated peracetic acid analyzer, peracetic acid monitor and peracetic acid controller.

CRIUS® PeraSense



- High resolution color display
- Intuitive user interface
- Graphing and datalogging
- NEMA 4X Enclosure
- Options:
 - Modbus RS485/LAN
 - Profibus
 - PID/flow controls
 - Remote sensors
 - Downloadable data logs
 - Up to 4 sensors
 - Remote access via LAN
 - Remote access via GPRS
 - Expandable to 16 sensors

Additional controller information may be found on the CRIUS product data sheet.

Mounting Options



- Open overflow cell (single, double or triple)



- Single closed flow cell



- 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 and calibration is a simple point (no zero required) operation.

In addition to the state of the art amperometric peracetic acid sensor, the PeraSense range of peracetic acid analyzers has all the functionality that you need, and more. The CRIUS® controller gives you the highest quality peracetic acid analyzer, 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

- Peracetic Acid 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 analyzer range is particularly suited to working in sites where reliability and ease of use are most important.

Specification

Type	Membrane covered, amperometric two-electrode system
Range	0-200mg/l, 0-500mg/l, 0-1000mg/l, 0-2000mg/l, 0-5000mg/l, 0-10000mg/l
Resolution	0.1mg/l, 0-1mg/l, 0-10mg/l (ppm) depending on probe
Reproducibility	< 1% error
Max Working Pressure	7.25 psi, no pressure impulses or vibrations
Flow Rate	Approximately 0.5L/m
Temperature Range	32° - 113° F (no ice crystals in the measuring water)
Temperature Compensation	Automatically by an integrated temperature sensor
pH Range	pH 1 up to pH 6
First Polarization Time	Approx. 60 min
Re-polarization Time	Approx. 15 min
Response time	T ₉₀ : approx 3 mins
Zero-point Adjustment	Not Necessary
Calibration	At the device, by analytical determination
Housing Material	PVC, Stainless Steel
Dimensions	Diameter approx 1 in, length 7.5 in
Maintenance intervals	
Membrane	12 months (depending on water quality)
Electrolyte	3-6 months (depending on water quality)
Interferences	Cl ₂ does not interfere O ₃ is measured with a sensitivity of 2500 times. ClO ₂ is also measured. Hydrogen Peroxide is measured with a sensitivity of 0.005 times >1% Sulfuric, Nitric or Phosphoric Acid

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 the Autoflush 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.

Cost of Ownership

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

In most situations the PeraSense analyzer 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.