



# Water Quality Analysers



## StreamerSense - Streaming Current Monitor

With the StreamerSense range of Streaming Current Monitors you get a world's first. The StreamerSense streaming current monitor is the first in the world to be designed in modular form so that it can be integrated with other sensors such as pH and UV254 to provide all the tools needed for a coagulation monitoring or a coagulation control instrumentation package.

**Tough-field proven and reliable**

**Stable and reliable - excellent process control**

**Suitable for all potable waters\***

**Up to 12 months between maintenance**

**User sensor verification**

**More than 5,000 installed worldwide**



*"With over 4,000 streaming current devices in use in the USA. I am really looking forward to using the StreamerSense." John Clark, USA*

The StreamerSense sensors are available with different controllers giving you the same great performance with different communication, display, and control options. With the StreamerSense range of streaming current monitors, you get everything that you need - and nothing that you don't, **without** sacrificing the quality of measurement.

*\*when charge neutralization is the primary coagulation mechanism*

### CRONOS<sup>®</sup> StreamerSense



- 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
  - 'Rugged' motor/sensor
- Can combine with other sensors

### CRIUS<sup>®</sup> StreamerSense



- High quality and multilingual
- Low cost
- Colour display and keypad
- Sophisticated comms and control
- Datalogging
- Up to 6 sensors
- Options:
  - All CRONOS<sup>®</sup> options plus:
    - texting alarms
    - remote internet access
    - automatic cleaning
    - 5.7" colour touchscreen
- Can combine with other sensors

### CRATOS StreamerSense



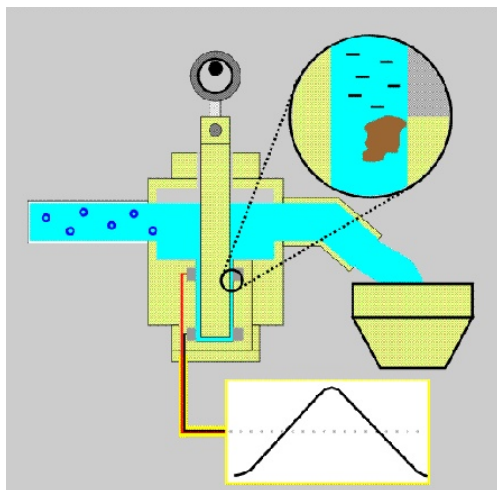
- High quality and multilingual
- Medium cost
- Colour touchscreen
- Datalogging
- Up to 12 sensors
- Options:
  - All CRONOS<sup>®</sup> and CRIUS<sup>®</sup> options plus:
    - lowest cost per point
- Can combine with other sensors

For more information please see the individual brochure - CRONOS<sup>®</sup>, CRIUS<sup>®</sup> and CRATOS

find us at [www.processinstruments.net](http://www.processinstruments.net)

## Principle of Operation

The StreamerSense Streaming Current Monitor provides a measure of the net colloidal and ionic charge in the water stream. It does this by employing a reciprocating piston in a restricted 'cup' or 'boot'. As the water sample flows through the sensor, colloidal particles and ions are attracted to the plastic walls of the sensor and as the water flows past them at high velocities (due to the restricted flow path). The cloud of positive counter ions surrounding the colloid is stripped off resulting in a current flowing in the sensor. This is detected and output back to the controller.



## Application

The primary application for streaming current monitors is in improving coagulation control in drinking water. The streaming current is related to Zeta Potential which is recognised as being a good measure of how much positively charged coagulant such as Alum or PAC is required to perform charge neutralisation/destabilisation in raw water.

For more information visit:

[www.processinstruments.net/streaming\\_current.php](http://www.processinstruments.net/streaming_current.php)

## Standard Features

- Patented sensor design
- Quick-replacement probe and piston
- Handles sample flow rate up to 20lmin<sup>-1</sup>
- Automatic zero adjustment
- Expandable sensitivity (gain) adjustment
- High/low alarm output

## Optional Features

- StreamerSense Rugged (heavy duty applications, accepts up to 35 lmin<sup>-1</sup> flow)
- Automatic sensor flush
- Sensor maintenance option

## Specification\*

### Sensor

<b>Sample Flow Rate:</b>	3-20lmin <sup>-1</sup>
<b>Sample Cell Type:</b>	External receiver, high flow
<b>Probe Type:</b>	Quick replacement cartridge
<b>Piston Type:</b>	Quick replacement
<b>Water Sample Connections:</b>	Inlet, 0.75" (19mm) OD, barb type
<b>Water Sample Outlets:</b>	1" (25mm) pipe to atmosphere
<b>Materials Contacting Sample:</b>	Delrin, nylon, neoprene, viton, PVC stainless steel
<b>Wiring Connections:</b>	1 ea, shielded, 4 conductor, 18 AWG
<b>Self Diagnostics:</b>	Motor, opto switch
<b>Enclosure:</b>	IP65, fibreglass reinforced
<b>Power Requirements:</b>	110 VAC, 1 A, 60 Hz 220 VAC, 1 A, 50 Hz (optional)
<b>Operating Temperature:</b>	1°C - 49°C
<b>Dimensions:</b>	234mm (W), 183mm (H), 135mm (D)
<b>Weight:</b>	4.5kg

### Optional

<b>StreamerSense Rugged:</b>	Heavy duty motor, higher flow capacity (high solids application)
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## Optional Accessories

<b>Automatic Sensor Flush:</b>	Sensor flush only
<b>Sensor Maintenance Option:</b>	Sensor flush and chemical wash



*StreamerSense Rugged*

*\*All subject to change without notice*

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

