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 Clar**k, 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® 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® StreamerSense

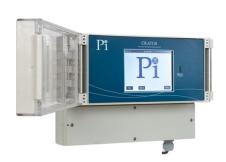


- High quality and multilingual
- Low cost
- Colour display and keypad
- Sophisticated comms and control
- Datalogging
- Up to 6 sensors
- Options:

All CRONOS® 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® and CRIUS® options plus:

- lowest cost per point

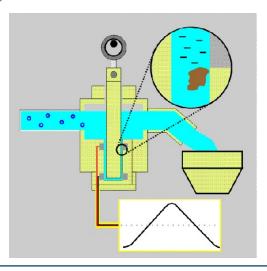
Can combine with other sensors

For more information please see the individual brochure -CRONOS®, CRIUS® and CRATOS

find us at 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

Standard Features

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

Optional Features

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

Specification*

Sensor

Sample Flow Rate: 3-20lmin-1

Sample Cell Type: External receiver, high flow **Probe Type:** Quick replacement cartridge

Piston Type: Quick replacement

Water Sample Connections: Inlet, 0.75" (19mm) OD, barb

Water Sample Outlets: 1" (25mm) pipe to atmosphere **Materials Contacting Sample:** Delrin, nylon, neoprene, viton,

PVC stainless steel

Wiring Connections: 1 ea, shielded, 4 conductor, 18

AWG

Self Diagnostics: Motor, opto switch

IP65, fibreglass reinforced Enclosure: **Power Requirements:**

110 VAC, 1 A, 60 Hz

220 VAC, 1 A, 50 Hz (optional)

1°C - 49°C

Dimensions: 234mm (W), 183mm (H),

135mm (D)

Weight: 4.5kg

Optional Accessories

Automatic Sensor Flush: Sensor Maintenance Option:

Sensor flush only Sensor flush and chemical



*All subject to change without notice

Optional

Operating Temperature:

StreamerSense Rugged: Heavy duty motor, higher flow

capacity (high solids

application)

