

# **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"

#### **CRIUS NA StreamerSense**



- Highest Quality Low Cost
- Multilingual
- High resolution color display
- Intuitive user interface
- Customizable home pages
- Additional Features

Up to 4 sensors Remote access via LAN Remote access via GPRS Expandable to 16 sensors

For more information please see the separate CRIUS NA brochure

#### **Sensor Selection**

#### StreamerSense



- Streaming potential
- Lower cost
- Discharges to atmosphere
- Up to 5 gallons per minute

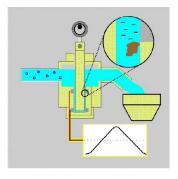
#### StreamerSense Rugged



- Streaming current
- Larger cell
- Larger motor
- Longer life
- Up to 20 PSI
- Up to 10 gallons per minute

#### **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.

#### **Applications**

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 recognized as being a good measure of how much positively

## **Specification StreamerSense**

Sample Flow Rate:	.25 gpm to 5 gpm
Sample Cell Type:	External receiver, high flow
Probe Type:	Quick replacement cartridge
Piston Type:	Quick replacement
Water Sample Connections:	Inlet 3/4", O.D., barb type
Water Sample Outlet:	1" pipe to atmosphere
Materials Contacting Sample:	Delrin, neoprene, viton, PVC, stainless steel
Wiring Connections:	4 Conductor shielded, 18 AWG
Self Diagnostics:	Motor, opto switch
Enclosure:	NEMA 250 type 4X, reinforced fiberglass
Power Requirements:	110 VAC, 60 Hz (std) 220 VAC, 50 Hz (opt)
Operating Temp:	34F - 120F
Dimensions:	9.25"(w), 7.25"(h) 5.5"(d)
Weight:	10 lbs.

charged coagulant such as Alum or PAC is required to perform charge neutralization / destabilization in raw water.

For more information visit: www.equip-solutions.com

#### **Standard Features**

- Patented sensor design
- Quick-replacement probe and piston
- Handles sample flow rate up to 5 gallons/min
- Automatic zero adjustment
- Expandable sensitivity (gain) adjustment
- High/low alarm output

#### **Optional Features**

- · Automatic sensor flush
- Sensor maintenance option
- Full control including flow proportional

Additional info may be found in EquipSolutions Tech Note 20 Coagulation Control Using Streaming Current Monitoring.

## **Specification StreamerSense Rugged**

Sample Flow Rate:	.25 gpm to 10 gpm
Sample Cell Type:	External receiver, high flow
Probe Type:	Quick replacement cartridge
Piston Type:	Quick replacement
Water Sample Connections:	Inlet 1", FNTP
Water Sample Outlet:	1" pipe to atmosphere
Materials Contacting Sample:	Delrin, neoprene, viton, PVC, stainless steel
Wiring Connections:	4 Conductor shielded, 22 AWG
Self Diagnostics:	Motor - RPM, signal health
Enclosure:	NEMA 250 type 4X, reinforced fiberglass
Power Requirements:	110 VAC, 60 Hz (std) 220 VAC, 50 Hz (opt)
Operating Temp:	34F - 120F
Dimensions:	9.25"(w), 7.25"(h) 5.5"(d)
Weight:	10 lbs.