
Engineering Specification **Streaming Current Monitor Model SCM-1**

The instrument shall be a complete streaming current measurement instrument for continuous monitoring and control of coagulant dosage to assist in optimizing the water or wastewater treatment process.

The instrument shall be a single module with integrated sensor and shall operate on 110VAC power.

The sensor shall receive a sample of treated water at a flow rate of 1 gallon per minute. The sensor shall have a sample inlet of 1/2" and outlet of 3/4" barb style fitting. The sample probe shall be connected with a thumbscrew for easy removal without the use of tools for inspection or service. The probe housing shall use a disposable Teflon™ sleeve, which may be replaced independently of the electrodes. The upper and lower electrode shall be independently replaceable to facilitate easy servicing of the probe. The Sensor shall include three (3) spare probe piston / sleeves. Non-serviceable sensors and probe assemblies are not acceptable.

The monitor shall be housed in a non-metallic NEMA 4x housing suitable for mounting outdoors. The meter enclosure shall have a facility to use a lock, or tamper-resistant device, to prevent unauthorized use.

The monitor shall provide an LED digital display of the streaming current value calibrated in millivolts with a range of -1000mV to +1000mV. The meter shall have control functions for 1) meter zero adjustment 2) continuous sensor sensitivity adjustment 3) internal amplifier gain adjustment 4) self diagnostic flashing LED sensor operation indicator 5) independent high and low alarm contact set-point adjustments 6) High and low alarm LED indicators. The adjustment controls shall be recessed and require the use of a trimmer tool to minimize tampering by unauthorized personnel.

The instrument shall be a Streaming Current Monitor Model SCM-1 as manufactured by Micrometrix Corporation.