

Memo



To City Manager and City Council
From Carl R. Ray, Water and Wastewater Director
Date 11/07/2024
Subject **Award Recommendation for Streaming Current Monitors**

The Water Treatment Plant uses streaming current monitors (detectors) to verify and adjust coagulant dosing in the treatment plant. We require two streaming current monitors, one of each process train. The monitors were budgeted and approved for 2024. The budgeted amount was \$50,000.00 for the two monitors.

Bid documents were prepared, the bid advertised, and individual possible vendors of this type of equipment were notified of the bid. Bids were opened on November 6th 2024 at 2:00 pm. One bid was received from Micrometrix Corporation in the amount of \$29,500.00. The bid documents were complete and all specifications were met.

Ideally, we would have received bids, but one vendor is discontinuing that type of equipment and others declined to bid. The bid amount is nearly half the budgeted amount and the vendor was contacted to review the bid and verify there were no misunderstandings and there were none.

We recommend awarding to bid for the streaming current monitors to Micrometrix Corporation in the amount of \$29,500.00.

ADVERTISEMENT FOR BIDS

The City of Craig, Colorado will receive sealed bids for **2 Streaming Current Monitors/Streaming Current Detectors** until 2:00 p.m., November 6, 2024, at the office of the City Clerk, 300 West Fourth Street, Craig, Colorado 81625, at which time they will be publicly opened and read aloud. The bid will be awarded at the City Council meeting on November 12, 2024. The specifications for the Streaming Current Monitors/Streaming Current Detectors are on file at the office of the City Clerk, 300 West Fourth Street, Craig, Colorado 81625, (lwhite@ci.craig.co.us) phone number (970) 826-2008.

No bid shall be withdrawn after opening the bid without the consent of the City of Craig, for a period of 30 days after the scheduled time for opening bids.

The City of Craig, Colorado (www.ci.craig.co.us) reserves the right to reject any or all bids and to waive any informality in the bidding.

The bids shall be completely filled out on the bid forms provided. Bids shall be addressed to the City of Craig and shall have the name of the bidder and “**2 Streaming Current Monitors/Streaming Current Detectors**” written thereon. Failure to comply with the provisions of this paragraph will be cause for rejection of bid.

City of Craig, Colorado

Chris Nichols, Mayor

Liz White, City Clerk

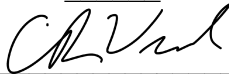
Published: October 9, 16 and 23, 2024

BID PROPOSAL FORM
2 STREAMING CURRENT MONITORS/STREAMING CURRENT DETECTORS
CITY OF CRAIG

Bidder Name: Micrometrix Corporation

Bidder Address: PO Box 7026 Gainesville, GA 30504

Bidder Phone No.: 770 271 1330

Signature: 

Title: President

Date: 11-4-24

Bid Instructions:

- A. Each item of this specification shall be individually annotated by the bidder in the column labeled **Compliance** with one of the following:
 1. Meets
 2. Exceeds
 3. Does not meet
 4. Not applicable
- B. If any item is marked “Exceeds”, “Does not meet”, or “Not applicable”, details must be given in the column labeled **Deviation**, along with each entry describing what is being bid.
- C. The individual cost of each item of the specifications must also be annotated if its cost has not been included in the basic bid price.

Specification	Compliance	Deviation
Power: 120 VAC 60 Hz at 3.2 amps	<u>Meets</u>	<u></u>
Communications: RS485 electrically isolated, Data rate: 1200 to 9600 Baud	<u>Meets</u>	<u></u>
Inputs: 2 dual digital, optically isolated, switch input or 5 to 24V input	<u>Meets</u>	<u></u>
Outputs: 4-20 mA card: Two 4-20mA outputs maximum load 500 Ω , electrically isolated	<u>Meets</u>	<u></u>
Operating Temperature: 0 to 50° C (32 to 122° F)	<u>Meets</u>	<u></u>
Sample Temperature: 7 to 35° C (45 to 95° F)	<u>Meets</u>	<u></u>
Storage Temperature: -20 to 70° C (-4 to 158° F)	<u>Meets</u>	<u></u>
Max. Relative Humidity: 95% for temperatures up to 50° C (122° F)	<u>Meets</u>	<u></u>
Response Time: 1 second to 1 minute, adjustable average	<u>Meets</u>	<u></u>
Sample Contact Components: stainless steel, Epoxy, UHMW	<u>Meets</u>	<u></u>
Sample Flow Rate: >1 L/min, 2-4 L/m recommended	<u>Meets</u>	<u></u>
Plumbing Connection: ½ in. NPT	<u>Meets</u>	<u></u>
Automatic Flush: ½ in NPT water connection, 145 psi Maximum pressure, 1 minute to 48 hour interval, 1 second to 4 minutes duration, 0 seconds to 4 minutes reading hold`	<u>Meets</u>	<u></u>
1-year Standard Warranty	<u>Meets</u>	<u></u>
1-year Extended Service Warranty	<u>Meets</u>	<u></u>
Calibration chemicals: 6-month supply of any chemicals for instrument calibration (if needed)	<u>Meets</u>	<u></u>

Bid Proposal

The signer of this proposal declares and agrees:

1. He/she has received and examined the bid specifications and is aware of the equipment requirements.
2. If this proposal is accepted, it will contract for furnish and deliver the required equipment as specified.
3. He/she has the ability to provide adjustment and repair of equipment as may be required under any warranty offered.
4. The bid price is for the equipment specified and delivered to Craig, Colorado.
5. The City of Craig reserves the right to reject any or all bids, re-bid or negotiate any bid, and will determine the proper equipment required although it may not be from the lowest bid.

Total price of bid: \$29,500.

Model SCD-W610

STREAMING CURRENT DETECTOR/ CONTROLLER

Features

- ▶ Pre-mounted
- ▶ Pre-wired
- ▶ 4~20mA Outputs
- ▶ NEMA Enclosures
- ▶ Serviceable Sensor
- ▶ Zero Offset Function
- ▶ Sensitivity Adjustment

Precise Coagulant Dose Control for Water Treatment



*Shown with optional self-cleaning

Sensor Advantage



The Micrometrix® SCM features an improved sensor design to provide years of trouble free service. The sensor probe is “user serviceable”. The user can easily replace a disposable sleeve and piston within the sensor probe to restore accuracy and sensitivity. This approach drastically reduces the cost of ownership of an SCM.

Patented

Benefits

- ▶ Chemical Savings
- ▶ Maintain Water Quality
- ▶ Early Warning Protection
- ▶ Prevent Upsets
- ▶ Optimize Treatment
- ▶ Reduce Residuals
- ▶ Easily Retrofitted



770.271.1330

micrometrix.com

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Engineering Specifications

The instrument shall be a fully self-contained Streaming Current Detector/Controller for continuous detection and control of coagulation/charge measurement for water, wastewater or industrial treatment processes.

The SCD and Controller shall be pre-mounted on a back panel for ease of wall or control panel installation. The SCD and Controller shall be pre-wired and operate on 110VAC power or 230VAC (optional).

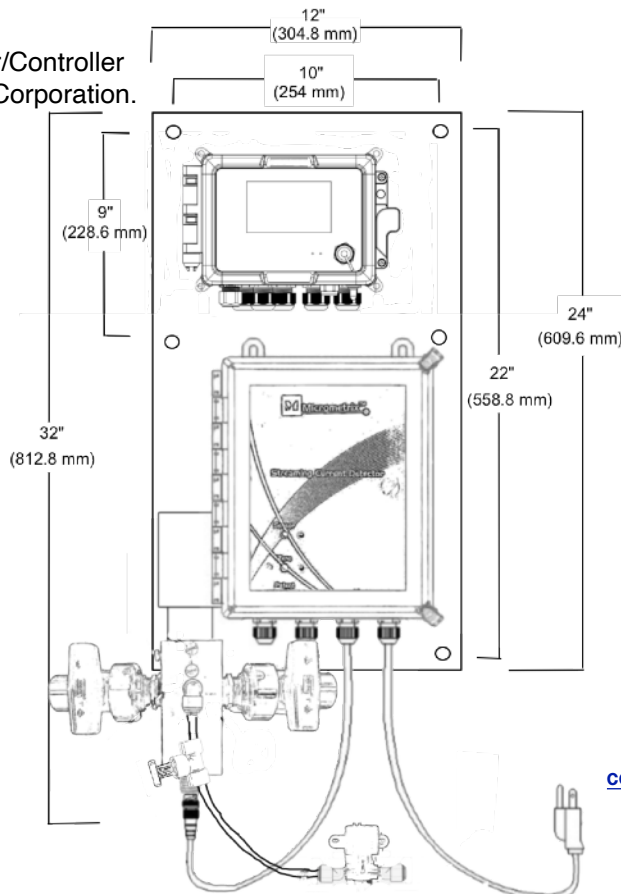
The sensor shall receive a sample of treated water at a flow rate of 1~4 liters per minute (1~10 GPM high flow optional). The sensor shall have a sample inlet of 3/4" and outlet of 1" barb style fitting. The sample probe shall be connected with a thumbscrew for easy removal without the use of tools for 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 two (2) spare probe piston / sleeves. Non-serviceable sensors and probe assemblies are not acceptable.

The SCD/Controller shall be housed in a non-metallic NEMA 4x enclosures suitable for mounting outdoors. The enclosures shall have a facility to use a lock, or tamper- resistant device, to prevent unauthorized use.

The SCD/Controller shall provide a 4~20mA outputs of the streaming current value and PID control signal output. The SCD/ Controller shall have control functions for 1) zero adjustment 2) continuous sensor sensitivity adjustment 3) internal amplifier gain adjustment 4) self diagnostic flashing LED sensor operation indicator. 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 Detector/Controller Model SCD-W610 as manufactured by Micrometrix® Corporation.

Specifications	Model SCD-T
Measurement	Streaming Current
Power	110 VAC / 230VAC (Optional)
Range	-1000 to +1000 mV
Accuracy	0.1%
Display Type	Color Touchscreen
Flow Rate	1~ 4 Liters/Min (Standard) or 1~ 10 GPM (Optional)
Connection Type	3/4" Barb Inlet 1" Barb Outlet
Response Time	1 Second
Self Diagnostic	Sensor LED
Probe Materials	Delrin, 316 SS, PTFE
Outputs	4~20mA, -10 ~ +10 V, 0~10V
Communication	Modbus (Optional)
Alarms	High Alarm, Low Alarm, Fault
Zero Adjust	Full Range
Enclosure	NEMA 4x, IP 65
Mounting Holes	22.0" x 10.00"
Weight	29 lbs , 13 kg



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