**Sulfite Monitoring**

**ChemScan® mini Sulfite Technical Specification**

### FUNCTIONS AND OUTPUTS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sulfite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Principle</td>
<td>Optical Absorbance</td>
</tr>
<tr>
<td>Detector</td>
<td>Photodiode</td>
</tr>
<tr>
<td>Spectral Range</td>
<td>410 nm</td>
</tr>
<tr>
<td>Calibration Technique</td>
<td>Factory calibrated for 5,5’-Dithiobis – (2-Nitrobenzoic Acid), DTNB</td>
</tr>
<tr>
<td>Number of Parameters</td>
<td>One – Sulfite (See UV- Series ChemScan Analyzers for multiple parameters)</td>
</tr>
</tbody>
</table>

### DATA COMMUNICATIONS

- Isolated 4-20 mA Analog (2 outputs available), RS-232
- 10,000 Values Time / Date Stamped
- Auto Zeroing: Yes (Standard)
- Auto Cleaning: Yes (Standard)
- No – Pressurized sample required – See below

### PERFORMANCE SPECIFICATIONS

- Reading Interval: 5 to 9999 minutes
- Reaction Time: 5 minutes minimum
- Range: Sulfite 0.01-4.0 mg/L
- Limit of Detection: 0.005 mg/L
- Accuracy: 5% of value or 2x detection limit (whichever is greater)
- Precision: Less than 0.5% of Range

### SAMPLE PARAMETERS

- Sample Pressure: Pressurized Sample Line Required Regulated to 15-70 kPa (2-10 psi), (Sample extraction accessory available – Pump and Sample Circulation Loop Assembly)
- Sample Flow: 0.5 to 5.0 l/min. 1.5 L flush per sample (0.13 to 1.32 gpm – 0.4 gallon flush)
- Filtration Requirement: None (For samples meeting turbidity and solids requirements)
- Sample Temperature: 10°C - 60°C (50°C - 140°F)
- Sample Turbidity: 0 - 60 NTU (Standard)
- Sample Suspended Solids: 0 - 150 mg/l TSS

### MAINTENANCE

- Reagent Replacement: As Required (6 weeks typical)
- Cleaning Solution Refill: As Required (4 weeks typical)
- Peristaltic Mixing Pump Head: Replace after six months of operation
- Peristaltic Mixing Pump Replacement: Replace after twelve months of operation
- Peristaltic Zeroing/Cleaning Pump Head: Replace after two years of operation

### INSTRUMENT SPECIFICATIONS

- Size: 66 cm tall x 24 cm wide x 18 cm deep (26” tall x 9.5” wide x 7” deep)
- Weight: 12.25 kg (27 lbs)
- Mounting: Wall (Standard)
- Finish Coating / Material: Fiberglass Reinforced Plastic (FRP)
- Power: 120-240 VAC ±10%, 50-60 Hz, 70 VA
- Power Connection: 120 VAC US-cord / plug set (Standard) (conduit connection optional)
- Power Condition: Dedicated Branch Circuit Free From: Surges/Dips > 10%, RF and Switching Noise
- Operator Interface: 2 x 20 LCD and 4 x 4 Keypad
- Sample Cell Material: Polymer Body with Quartz Windows
- Sample Connection: ¼” FNPT Fitting
- Waste Connection: 6 foot length of 5/8” ID clear vinyl tube provided (route to open drain)
- Cleaning Solution Container: 10 Liters (2.5 gallon) Typical location is on the floor below the analyzer
- Reagent Container: 4 Liter (1 gallon) Wall-mounted, PVC rack (provided)

### OPERATING ENVIRONMENT

- Enclosure Ratings:
  - Upper Enclosure: NEMA 4X (Fiberglass Reinforced Plastic) Polyester, Acrylic window
  - Lower Enclosure: NEMA 4X (Fiberglass Reinforced Plastic) Polyester
- Ambient Temperature: 5 - 35°C (41 – 95°F)
- Relative Humidity: 0 - 100% (Non-Condensing)
  - For installation in an indoor or sheltered location

### SAFETY APPROVAL

- CSA - US

Notes:
1. Technical Specifications are subject to change without notice.
2. All performance specifications are based on analysis of water standards under factory conditions.

Test in Accordance with USA EPA 40 CFR APPENDIX B PART 136

Test in Accordance with USA EPA SW-846