

## L450SO<sub>2</sub> Online Sulfite Analyzer

Liquid Analysis Systems' L450 series chemical analyzers perform online wet chemical titrametric analyses of most aqueous chemical species using pH, ORP, ISE, turbidimetric and other sensors. The L450 features are optimized for extreme reliability, ease of operation, and minimum operating cost.

## **L450 Series Features**

- Auto sample retrieval and preparation
- Result range and trend check
- Settable auto-drop/repeat of stray readings
- Auto-check of titrant, sample, and sensors
- Output options for recording, alarming, dosing, and/or replenishing

Through its display and keypad, users can view process status and history, and modify analysis intervals and other configuration parameters.



Additionally, the user has the capability to operate analyzer hardware and to monitor sensor readings. This series offers a variety of hardware options for stream selection, sample preparation, and sample/reagent delivery.

## **Series Options**

- Multi-stream selection
- Multi-parameter analysis
- Standard precision titrant dose pumps with better than ±5% accuracy
- High precision titrant burette pumps with better than ±2% accuracy
- Grab sample port
- Replenishment systems
- RS-485/Ethernet networking/E-mail messaging

## L450SO<sub>2</sub> Online SO<sub>2</sub> Analyzer

The L450SO<sub>2</sub> online analyzer measures  $SO_2$  (or  $H_2SO_3$ ) concentration in water, wastewater, or process streams by means of a robust iodometric redox titration. The differential endpoint detections employed are immune to the effects of sensor drift.



Model	
L450SO2-121	Base model with one sample dose pump, two standard precision reagent dose pumps (KI-KIO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ), sample eductor, and single stream inlet.
Options	
-AC	Auto calibration from standard solution.
-CV	Ceramic valves for high particulate tolerance.
-G	Grab sample capability. Sipper tube inlet.
-HP (L500 model)	High precision using 0.1 µl resolution titration burette.
-MSx	Multi-stream, $x =$ number of streams.
-SC	Sample cooler
-WF	Auto back flush of sample filter.

Specifications	
Ranges	Any 1:50 range from 0.25 to 200,000 ppm. E.g., 1 to 50 ppm
Repeatability	Standard: ± 5% of span
	With –HP option: $\pm$ 2% of span
Method	Total SO <sub>2</sub> by iodide-iodate titration in acidified sample
Cycle time	Approx. 5 minutes + settable delay
Calibration	12 month interval recommended
Reagent consumption	Standard precision models: 50 to 500 µl / test
Power required	100/240 VAC 50/60 Hz
Sample pressure	2 to 20 psig
Sample temperature	10 to 50 °C
Sample streams	Standard: 1, Optional: up to 4. <sup>1</sup> / <sub>8</sub> " tube connection.
Water	100K ohm resistivity, minimum
	20 to 60 psi, 1/4" tube connection
Drain	½" NPT-F connection
Vent (to drain)	1/4" tube connection
Enclosure	20" H x 16" W x 13" D, wall mount, NEMA 4X/IP66
	-HP: 24" H x 24" W x 16" D, wall mount, NEMA 4X/IP66
Display/Touchscreen	3" x 2.2", LCD with backlight
Outputs	Relay, 4-20mA, Ethernet, or serial (select one)

Specifications subject to change