



# L450-SC1

## Online SC1 Analyzer

Liquid Analysis Systems' L450 series chemical analyzers perform online wet chemical titrimetric 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
- Auto sample-filter back flush
- Result range and trend check
- Settable auto-drop/repeat of stray readings
- Auto-check of titrant, sample, and electrodes
- Optional control outputs for recording, alarming, 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 electrode 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  $\pm 2.5\%$  accuracy
- High precision titrant burette pumps with better than  $\pm 0.5\%$  accuracy
- Grab sample port
- Replenishment systems
- RS-485/Ethernet networking/E-mail messaging

### L450-SC1 Analyzer

The L450-SC1 online SC1 analyzer measures hydroxide and peroxide in process streams by means of robust, differential endpoint electrochemical titrations. No colorimetric dyes or indicators are required. For dependable process control, each analysis is automatically replicated and cross-checked prior to posting, alarming or dosing.



L450-SC1 Model & Options	
L450-SC1	Base model with two standard precision titrant dose pumps, one sample/waste pump, and a single stream inlet.
Options	
-AT	Auto tune of replenishment dosing factors
-D	Dosing pump for auto replenishment. 200 ul/stroke standard.
-DI	Digital input for remote control of analyses or dosing
-E1	Ethernet server for remote monitoring via web browser
-E2	Email output of data and alarms
-GS1	Auto grab sample capability. Sipper tube inlet.
-HP	High precision. 0.1 µl resolution titration burette.
-SA-x	Stream addition, x = number of streams.
-SK	Spares kit (standard and extended available)
-WF	Auto water back flush of sample filter.

L450-SC1 Specifications	
Range	Configurable over ranges 1:1:3 to 1:1:60
Repeatability	Standard method: ±2% of range. Configurable and inversely proportional to cycle time.
Method	H <sub>2</sub> O <sub>2</sub> : Differential redox titration with CeSO <sub>4</sub> NH <sub>4</sub> OH: Differential pH titration with H <sub>2</sub> SO <sub>4</sub>
Cycle time	Approximately 7 minutes per stream
Calibration	Suggested at 1 year interval
Reagent consumption	Standard precision models: 100 to 500 µl / test High precision (-HP) models: 20 to 100 µl/test
Power required	100/240 VAC 50/60 Hz
Sample flow	50 to 100 ml/min
Sample temperature	15 to 60 °C
Sample connection	In: 1/8" tube, return: 3/8" tube, vent: 1/4" tube
Sample streams	Standard:1 Optional: up to 5
Drain	1/2" tube connection. NPT(F) optional.
Vent (to drain)	1/4" tube connection
Enclosure	24" H x 20" W x 10" 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
Analog or digital outputs	Per user requirement.
Network output	Ethernet or email of status and alarms optional

Specifications subject to change