Liquid Analysis Systems

L450SCN Analyzer

Liquid Analysis Systems' L450 series chemical analyzers perform dependable 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 use, and minimum operating cost.

L450 Series Features

- Auto sample retrieval and preparation
- Result range and trend check
- Auto-check of titrant, sample, and electrodes

Through its display and keypad, users can view process status and history, and modify analysis intervals and other configuration parameters. This series offers a variety of hardware options for stream selection, sample preparation, and sample/reagent delivery.

Series Options

- Multi-stream and multi-parameter analysis
- Standard or high precision titrant dose pumps
- Auto standards analysis
- Grab sample port option
- Auto sample filter back flush
- Ethernet networking and email messaging
- Outputs for recording, alarming, and/or replenishing
- Replenishment controls and systems

L450 Thiocyanate Analyzer

The online L450SCN analyzer measures thiocyanate in water by means of a precise and reliable potentiometric titration. With differential endpoint detection, the electrode does not require calibration, and sensor drift common with other methods is eliminated. No colorimetric indicator is required. For dependable process control, each analysis is replicated and/or trend checked prior to posting, alarming, or replenishing. Sampling can be drawn from pressurized sample stream or open tank. For sample with particulate, a sample strainer with automatic backflush is offered. For heated samples, sample cooling is offered to achieve sharp endpoints and optimally precise results.

Liquid Analysis Systems

Analyzer Model	
L450SCN	Base model with standard precision (20 µl) titrant dose pump, one sample/waste pump, single stream inlet, 4-20 mA output.

Options	
DI	Digital input for remote enable of analyses or dosing
DO	Digital output relay with settable trip point or other control function
EB	Ethernet server for remote monitoring via web browser
G1	Auto grab sample with sipper tube inlet
MS	Multi-stream sampling
RR/P	Replenishment control (Relay or Pneumatic output options)
SB	Sample inlet strainer with auto backflush.
SKB/E	Spares kit (Basic or Extended version)

Specifications	
Method	Differential potentiometric titration with $AgNO_3$.
Ranges	User settable.
Inaccuracy	≤1% of range
Cycle time	5 minutes, typical. Additional time required for process ranges > 1:20, and stream switching.
Equipment stability	< 1% drift per year exclusive of titrant drift.
Reagent consumption	~200 µl/replicate at mid range.
Power required	100 to 240 VAC, 50/60 Hz
Sample streams	Standard: 1 Optional: up to 8
Sample conditions	0 to 40 psig, < 50 µm particulate, 10 to 60 °C. Other ranges require sample preparation.
Sample connection	¼" NPT
Waste	¼" NPT. ½" tube adapter provided.
Leak	$^3/_8$" tube connection
Enclosure	22"Hx18"Wx10"D (55x46x26cm), wall mount, NEMA 4X/IP66
Display	3" x 2.2", LCD with backlight
Outputs	Standard: 4-20 mA process value(s) and one maintenance alarm relay. Optional: alarm relay with settable trip point, Ethernet, and/or serial network per user requirements.
Ambient limits	4 to 40°C. 5 to 95% humidity, non-condensing.

Specifications subject to change