Liquid Analysis Systems

L450 Cu Analyzer

Liquid Analysis Systems' L450 series chemical analyzers perform dependable online wet chemical analyses of most aqueous chemical species using LED, 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
- Grab sample port
- Auto sample filter back flush
- Ethernet networking and email messaging
- Outputs for recording, alarming, and/or replenishing
- Replenishment systems

L450 Cu Analyzer

The online L450 Cu analyzer measures copper in water by means of reliable and sensitive colorimetric analysis. With automatic background correction, sensor drift common with other methods is eliminated. The method comprises pH buffering, Cu reduction, and a digestion period for color development. To achieve dependable process control, each analysis is automatically replicated and/or trend checked prior to posting, alarming, or replenishing. Sample can be drawn from a pressurized sample stream or pumped from a process tank. For sample with particulate, a sample strainer with automatic backflush is offered as an option.

Liquid Analysis Systems

Analyzer Model	
L450Cu	Base model with standard precision (20 µl) titrant dose pumps, 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
PC	Supervisory Windows™ PC software license
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	pH buffering followed by Cu++ reduction with ascorbic acid to Cu+ and bicinchoninate color development
Ranges	0 to 5 ppm
Inaccuracy	0.25 ppm
Cycle time	7 minutes, typical
Equipment stability	5% per year
Reagent consumption	0.2 to 1 ml/test, dependant on sample pH and range
Power required	100 to 240 VAC, 50/60 Hz
Sample streams	Standard: 1 Optional: up to 8
Sample conditions	0 or 5 to 20 psig, < 50 µm particulate, 50 to 95 °F.
Sample connection	¼" NPT or tube
Waste	¼" NPT, ½" tube adapter provided.
Leak	3/8" tube connection
Enclosure	22"Hx18"Wx10"D, 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