

L460 Hardness Analyzer



Liquid Analysis Systems' L460 series chemical analyzers perform dependable online colorimetric measurements. The L460 is optimized for extreme reliability, ease of use, and minimum operating cost.

L460 Series Features

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

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 analysis
- Grab sample port
- Auto sample filter back flush
- Sample diluter for extended range
- Replenishment and dosing systems
- RS 485/Ethernet networking/email messaging

L460 Hardness Analyzer

The atline L460 Hardness analyzer measures water hardness by means of the proven Calmagite colorimetric method. The analyzer can be configured to measure and report calcium, magnesium, or both. For dependable process control, each analysis can be automatically replicated and/or trend checked prior to posting, alarming, or replenishing. Sampling can be drawn from pressurized sample stream or pumped from overflow sampler. For sample with particulate, a sample strainer with automatic backflush is offered.



Analyzer Model	
L460CaMg	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
EB	Ethernet server for remote monitoring via web browser
GS	Auto grab sample with sipper tube inlet.
MS	Multi-stream sampling
SD	Sample diluter for extended analysis range
SB	Sample inlet strainer with auto backflush.

Specifications	
Method	pH adjustment is followed by color development with Calmagite reagent. EDTA releases Ca from the color complex. EGTA releases both Ca and Mg. Intensity changes at 520 nm are used to determine concentrations.
Range	0 to 4 ppm as CaCO ₃
Repeatability	≤1% of range
Cycle time	3 to 7 minutes per stream, dependant upon sample conditioning and span and repeatability settings
Equipment drift	<1% / year, typical
Reagent consumption	200 µl/test
Power required	100 to 240 VAC, 50/60 Hz
Sample streams	Standard: 1 Optional: up to 4
Sample conditions	Standard: 5 to 20 psig, < 50 µm particulate, 10 to 80 °C Other: consult factory
Sample connection	¼" NPT
Air supply (for option SB)	Compressed, oil-free, ¼" tube or NPT-F connection
Waste	¼" NPT. ½" tube adapter provided.
Leak	⅜" 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), maintenance alarm relay. Optional: alarm relay with settable trip point, Ethernet, and/or serial network per user requirements.

Specifications subject to change