



## SP510 Hardness Analyser (1 mg/L trip point)

**Product #:** 5410001  
**ZAR Price:** Contact Hach  
**Ships within 2 weeks**

### Maximise your softener cycle time and minimise your regeneration cost.

Immediately signal hardness breakthrough to activate regeneration. Makes your water softening system more efficient and less costly. Reliable, simple and accurate- with automated calibration. Continuous monitoring in "real time".

#### Continuous hardness detection

The SP510 monitor detects hardness breakthrough when the capacity of a water softener is exhausted, immediately signaling the need for regeneration. Alarm points are 0.3, 1, 2, 5, 10, 20, 50, and 100 ppm (expressed as mg/L of  $\text{CaCO}_3$ ) and are selected by choosing the appropriate model. Easy to read LED indicators show a simple "HARD" or "SOFT" sample status. You can also use SP510's built-in alarm relay to actuate an external annunciator.

#### Low maintenance requirements

The SP510 samples water every two minutes, operating automatically for up to 60 days. It is virtually maintenancefree, requiring only about 15 minutes every two months to replenish and standardise the reagents. Replace tubing in the pump system every six months.

#### Convenient, trouble-free operation

The SP510 monitor makes your water softening system more efficient and less costly. It eliminates the guesswork so your softener is regenerated only when needed. Regeneration based on calculation or set times can be replaced with continuous monitoring and automatic control, lowering reagent consumption.

#### Rugged, lightweight, and self-contained

The SP510 case is made of ABS plastic which is lightweight, corrosion-resistant, and shatterproof. This sealed case is IP62-rated and has a hinged door for easy access to internal components.

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## Specifications

Accuracy:	±25% of set point value
Alarm:	2 consecutive cycles above set point activate alarm.  1 cycle below set point cancels alarm.  Alarm type: LED indicators, Hard or Soft
Alarm points:	1 mg/L of $\text{CaCO}_3$ trip point
Certifications:	NRTL certified to UL and CSA standards, and CE approved
Cycle Time:	2.0 min average
Dimensions (H x W x D):	419 mm x 318 mm x 178 mm
Enclosure rating:	IP62
Fitting:	Inlet: ¼-in. OD tube quick-disconnect fitting

	Outlet: ½-in. ID flexible hose
Light source:	LED with peak wavelength of 610 nm
Maintenance Interval:	Standardise and replenish reagents every 2 months using EDTA or high-level sample
	Replace pump tubes every 6 months
Material Enclosures:	ABS plastic, large plastic windows to view alarm and reagents level
Measurement method:	Colorimetric
Mounting:	Wall mount
Operating Humidity:	5 - 95%, non-condensing
Operating temperature range:	5 - 40 °C
Outputs:	1 SPDT relay
Power requirements (Hz):	50/60 Hz
Power requirements (Voltage):	115/230 VAC
Reagent Consumption:	500 mL each indicator and buffer every two months
Repeatability:	±10% of set point value in 0.3 - 2 mg/L ranges;
	± 4% of set point value in 5 - 100 mg/L ranges
Sample Flow Rate:	50 - 500 mL/min
Sample Pressure:	0.07 - 0.34 bar (0.10 bar is optimum)
	Sample conditioning: 0.10 - 5.17 bar
Storage conditions:	-40 - 60 °C
Warranty:	12 months
Weight:	11.3 kg
What's included?:	SP510 Hardness Monitor, two month's supply of reagents, an installation kit, a maintenance kit, Hach user manual.

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