



EZ1017 Calcium Hardness Analyser

Product #: EZ1017.XXXXXXXXXX
AED Price: Contact Hach

Online colorimetric analysis of Calcium Hardness in water

EZ1000 Calcium Hardness Analysers achieve excellent precision and accuracy. At the heart of the colorimeter there is a compact photometer assembly developed especially for the EZ Series. Consumption of reagents is reduced by low volume analysis, yet high sensitivity is assured by a long optical path length. The limit of detection is in the low $\mu\text{g/L}$ range.

Results you can rely on

Smart automatic features for calibration, validation, priming and cleaning are embedded in the controller software and contribute to analytical performance, maximised uptime and negligible operator intervention. Precision micropumps dose all reagents. Sample lines and analysis vessel are cleaned with demineralised water to eliminate cross contamination between samples. Electronic and wet-chemical part of the analyser are strictly separated. A transparent door allows for instant visual inspection of the wet part.

Flexibility that meets your needs

EZ Series Calcium Hardness Analysers come in an attractive, ergonomic mainframe with a compact footprint. All hardware is controlled by the integrated industrial panel PC. The modular build allows for the analyser to match your application and operational needs.

- The standard measuring range can be narrowed by a different calibration range or extended via internal dilution options.
- Analogue and digital output options
- Multiple stream analysis for up to 8 sample streams

There are many additional options available. Please contact Hach for more details.

Specifications

Alarm:	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts
Ambient temperature:	10 - 30 °C \pm 4 °C deviation at 5 - 95% relative humidity (non-condensing)
Analogue outputs:	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)
Automatic cleaning:	Yes
Calibration:	Automatic, 2-point; frequency freely programmable
Certifications:	CE compliant / ETL certified
Cycle Time:	10 min (dilution + 5 min.)

Demineralised water:	For rinsing / dilution
Detection limit:	$\leq 2.5 \mu\text{g/L CaCO}_3$
Digital outputs:	Optional: Modbus (TCP/IP, RS485)
Dimensions (H x W x D):	690 mm x 465 mm x 330 mm
Drain:	Atmospheric pressure, vented, min. Ø 32 mm
Earth connection:	Dry and clean earth pole with low impedance ($< 1 \text{ Ohm}$) using an earth cable of $> 2.5 \text{ mm}^2$
Flow rate:	100 - 300 mL/min
Instrument air:	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Interferences:	Dissolved Copper Cu(II) $> 2 \text{ mg/L}$, Iron Fe(II) $> 20 \text{ mg/L}$, Manganese $> 10 \text{ mg/L}$, Zinc $> 5 \text{ mg/L}$, Lead $> 5 \text{ mg/L}$, Aluminium $> 5 \text{ mg/L}$ and Tin Sn(IV) interfere. Orthophosphate precipitates Calcium at the pH of the test. Strontium and Barium give a positive interference and alkalinity in excess of 300 mg/L may cause an indistinct end point in hard waters. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Material:	Hinged part: Thermoform ABS, door: PMMA Wall section: galvanised steel, powder coated
Measurement method:	Colorimetric measurement at 610 nm using hydroxynaphthol blue/EDTA
Measuring range:	0.025 - 1 mg/L CaCO_3 Optional: 0.005 - 0.25 mg/L 0.005 - 0.5 mg/L 0.2 - 4 mg/L (with internal dilution) 0.4 - 8 mg/L (with internal dilution) 0.25 - 10 mg/L (with internal dilution) 0.625 - 25 mg/L (with internal dilution) 1.25 - 50 mg/L (with internal dilution) 1.875 - 75 mg/L (with internal dilution) 2.5 - 100 mg/L (with internal dilution)
Method:	Colorimetric
Model:	EZ1017
Number of sample streams:	1, 2, 4, or 8
Parameter:	Calcium Hardness
Power:	100 - 240 VAC, 50/60 Hz Max. power consumption: 120 VA
Precision:	Better than 2% full scale range for standard test solutions
Protection class:	Analyser cabinet: IP44 / Panel PC: IP65
Reagent Requirements:	Keep between 10 - 30 °C
Sample pressure:	By external overflow vessel
Sample quality:	Maximum particle size 100 μm , $< 0.1 \text{ g/L}$; Turbidity $< 50 \text{ NTU}$
Sample temperature:	10 - 30 °C
Validation:	Automatic; frequency freely programmable

Warranty:	24 months
Weight:	25 kg
What's included?:	EZ1017 Calcium Hardness Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets, 3 x empty 2.5L Reagent Containers with Fittings (for Colour, Acid, and EDTA Solution) and 1 x empty 5L Reagent Container with Fittings (for Buffer)

What's included?

EZ1017 Calcium Hardness Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets, 3 x empty 2.5L Reagent Containers with Fittings (for Colour, Acid, and EDTA Solution) and 1 x empty 5L Reagent Container with Fittings (for Buffer)