



# **EZ4043 Total Hardness Analyser**

Product #: EZ4043.XXXXXXXX

AED Price: Contact Hach

### Online, automatic titration of Total Hardness in water monitoring applications

#### State of the art titration platform

The EZ4000 Series Analysers are single-parameter titrators built on an industrial analytical platform. High precision dispensers, robust peristaltic pumps and carefully designed liquid pathways all add up to the highest performance for industrial and environmental analysis needs.

#### Unique flexibility in titration methods

Every application starts with the basics: the right titrimetric technique for the parameter of interest, the measuring range and the water matrix. Depending on the change in the specific variables, the EZ4000 Series run either acid-base, redox, precipitation or photocolorimetric titration allowing for a unique flexibility.

The EZ4043 Total Hardness Analysers use colorimetric titration and have a standard measuring range of 0.05 - 10 mg/L CaCO<sub>3</sub>. They combine an unparalleled expertise in online titration with a set of unique analysis, control and communication features in a compact footprint:

- Smart automatic features
- Control and communication via industrial panel PC
- Analogue and digital output options
- Multiple stream analysis (up to 8 streams)

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

## **Specifications**

Alarm: 1x malfunctioning, 4x user-configurable, max. 24 VDC/0.5 A, potential free contacts

Ambient temperature:  $10 - 30 \text{ °C} \pm 4 \text{ °C}$  deviation at 5 - 95% relative humidity (non-condensing)

Analogue outputs: Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)

Calibration: N.A.

Certifications: CE compliant / UL certified

Cycle Time: 10 - 15 minutes

Demineralised water: For rinsing / dilution

Detection limit:  $\leq 0.25 \text{ mg/L}$ 

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 Ohm) using an earth cable of > 2.5 mm<sup>2</sup>

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: Some metal ions interfere by causing fading or indistinct end points or by stoichiometric

consumption of EDTA. Suspended or colloidal organic matter also may interfere with the end point. 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 titration by EDTA using colour indicator calmagite at 620 nm

Measuring range: 0.25 - 10 mg/L CaCO<sub>3</sub>

Optional:

Internal dispenser dilution (max. factor 100)

Method: Titrimetric

Model: EZ4043

Number of sample streams: 1, 2, 4 or 8

Parameter: Hardness, total

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: 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 g/L; Turbidity < 50 NTU

Sample temperature: 10 - 30 °C

Validation: Automatic; frequency freely programmable

Warranty: 24 months
Weight: 25 kg

What's included?: EZ4043 Total Hardness Analyser, Instruction Manual, 1 x Double Bit Door key, 1 x Mounting

Brackets, 3 x empty 5L Reagent Containers with Fittings (for Buffer, Colour & Acid Solution)

and 1 x empty 10L Reagent Container with Fittings (for EDTA Solution)

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