



EZ4041 Total Hardness Analyser

Product #: EZ4041.XXXXXXXXXX
ZAR 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 EZ4041 Total Hardness Analysers use colorimetric titration. They combine an unparalleled expertise in online titration with a set of unique analysis, control and communication features in a compact footprint:

- Wide standard measuring range of 0-1000 mg/L CaCO_3
- 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 °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)
Calibration:	N.A.
Certifications:	CE compliant / UL certified
Cycle Time:	10 - 15 minutes

Demineralised water:	For rinsing / dilution
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 mm²
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.
Lower Limit of Detection (LOD):	≤ 10 mg/L
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:	100 - 1000 mg/L CaCO ₃
	Optional:
	10 - 100 mg/L CaCO ₃
	25 - 250 mg/L CaCO ₃
	50- 500 mg/L CaCO ₃
	Internal dispenser dilution (max. factor 100)
Method:	Titrimetric
Model:	EZ4041
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
Range:	100 - 1000 mg/L CaCO ₃
Reagent requirements:	Keep between 10 - 30 °C
Sample Flow Rate:	100 - 300 mL/min
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:	12 months
Weight:	25 kg
What's included?:	EZ4041 Total Hardness Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets, 3 x empty 2.5L 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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