EZ4003 Free Alkalinity Analyser

Product #:	**EZ4003.XXXXXXXX**
ZAR Price:	Contact Hach

Online, automatic titration of Alkalinity 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 EZ4003 Free Alkalinity Analysers use acid-base 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 range of 100-2500 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 ± 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:	Automatic, 2-point; frequency freely programmable
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:	Soaps, oily matter, suspended solids or precipitates may coat the glass electrode and cause a sluggish response. Allow additional time between titrant additions to let the electrode come to equilibrium or clean the electrodes occasionally.
Lower Limit of Detection (LOD):	$\leq$ 10 mg/L
Material:	Hinged part: Thermoform ABS, door: PMMA
	Wall section: Galvanised steel, powder coated
Measurement method:	Acid-base titration with hydrochloric acid
Measuring range:	100 - 5000 mg/L $CaCO_3$
	Optional:
	10 - 500 mg/L $CaCO_3$
	25 - 1250 mg/L $CaCO_3$
	50 - 2500 mg/L $CaCO_3$
	Internal dispenser dilution (max. factor 100)
Method:	Titrimetric
Number of sample streams:	1, 2, 4 or 8
Parameter:	Alkalinity, free
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 - 5000 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