

# EZ1004 Boron B(III) Analyser

**Product #:** AED Price: EZ1004.XXXXXXXXX Contact Hach

## Online colorimetric analysis of dissolved Boron in water

EZ1000 Boron 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  $\mu$ 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 invervention. 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 Boron 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

# 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:	15 min (dilution + 5 min.)
Demineralised water:	For rinsing / dilution
Detection limit:	100 µg/L

Digital outputs: Dimensions (H x W x D):	Optional: Modbus (TCP/IP, RS485) 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 $mm^2$
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:	Aluminium, Iron, Copper, Titanium and Zinc ions in high concentrations may interfere. 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 405 nm using Azomethine-H
Measuring range:	Standard Range: 200 - 2000 μg/L
	Optional:
	50 - 500 µg/L (25% of Standard Range)
	100 - 1000 μg/L (50% of Standard Range)
	1000 - 10000 μg/L (with 5x internal dilution)
	2000 - 20000 µg/L (with 10x internal dilution)
	5000 - 50000 μg/L (with 25x internal dilution)
Model:	EZ1004
Number of sample streams:	1, 2, 4, or 8
Parameter:	Boron B(III), dissolved
Power:	100 - 240 VAC, 50/60 Hz
	Max. power consumption: 120 VA
Power supply:	100 - 240 VAC, 50/60 Hz
Precision:	Better than 2% full scale range for standard test solutions
Protection class:	Protection class: Analyser cabinet: IP44 / Panel PC: IP65
Reagent Requirements:	Keep refrigerated.
Sample pressure:	By external overflow vessel
Sample quality:	Maximum particle size 100 $\mu m,$ < 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?:	EZ1004 Boron Analyser, Instruction Manual, 1 x Double Door Bit Key, 1 x Mounting Brackets, 1 x empty 5L Reagent Container with Fittings (for Buffer Solution) and 1 x empty Plastic Dark 5L Container with Fittings (for Colour Solution)

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