



# EZ1029 Nitrate Analyser

Product #: EZ1029.XXXXXXXX

ZAR Price: Contact Hach

# Online colorimetric analysis of Nitrate in water

EZ1000 Nitrate 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 µg/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 Nitrate 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 ± 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

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 mm<sup>2</sup>

Instrument air: Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air

Interferences: Ions like Antimony Sb(III), Bismuth, Chloroplatinate, Gold, Iron Fe(III), Lead, Mercury,

Metavanadate, Silver can precipitate with Nitrate. Presence of Copper Cu(II) may decompose the diazonium salt which results in a low result. Strong oxidizing agents. Tricloramine results in a false red colour. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and

tar.

Lower Limit of Detection (LOD):  $\leq 0.2 \text{ mg/L}$ 

Material: Hinged part: Thermoform ABS, door: PMMA

Wall section: galvanised steel, powder coated

Measurement method: Colorimetric measurement at 546 nm using NEDD, conform with standard method ASTM 4500-

NO3-A

Measuring range:  $0.2 - 10 \text{ mg/L NO}_3\text{-N}$ 

Model: EZ1029

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

Parameter: Nitrate

Power: 100 - 240 VAC, 50/60 Hz

Max. power consumption: 120 VA

Power supply: 100 - 240 VAC, 50/60 Hz

Precision: Better than 3% full scale range for standard test solutions

Protection Class: Protection class: Analyser cabinet: IP44 / Panel PC: IP65

Range: 0.2 - 10 mg/L NO 3 - N

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?: EZ1029 Nitrate Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets,

1 x empty 2.5L Reagent Container with Fittings (for Sulfamic Acid & Buffer Solution), 1 x empty 5L Reagent Container with Fittings (for Reductor Solution) and 1 x empty 2.5L Glass Reagent

Container with Fittings (for Colour Solution)

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