



## EZ1031 Phosphate Analyser (Vanadate Yellow Method) PO<sub>4</sub>-P

**Product #:** ZAR Price:

EZ1031.XXXXXXXXX Contact Hach

## Online colorimetric analysis of Phosphate in water (Vanadate Yellow Method)

EZ1000 Phosphate 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 Phosphate 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 $\pm$ 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:	10 min (dilution + 5 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 $mm^2$
Instrument air:	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Interferences:	Positive interference is caused by Silica Arsenate if the sample is heated. Negative interferences are caused by Arsenate, Fluoride, Thorium, Bismuth, Sulphide, Thiosulphate, Thiocyanate or excess of Molybdate. Blue colour is caused by Ferrous Iron but this does not affect results for Ferrous Iron concentrations < 100 mg/L. If Nitric Acid is used, Chloride interferes from 75 mg/L. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Lower Limit of Detection (LOD):	$\leq 20 \ \mu g/L$
Material:	Hinged part: Thermoform ABS, door: PMMA
	Wall section: Galvanised steel, powder coated
Measurement method:	Colorimetric measurement using vanadate yellow method (450 nm)
Measuring range:	0.1 - 10 mg/L PO - P
Model:	EZ1031
Number of sample streams:	1, 2, 4, or 8
Parameter:	Orthophosphate (PO <sub>4</sub> -P)
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:	0.1 - 10 mg/L PO <sub>4</sub> -P
	Optional:
	0.02 - 1 mg/L
	0.05 - 2.5 mg/L
	0.05 - 5 mg/L
	0.8 - 40 mg/L (with internal dilution)
	1.6 - 80 mg/L (with internal dilution)
	10 - 1000 mg/L (with internal dilution)
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:	5 - 30 °C
Validation:	Automatic; frequency freely programmable
Warranty:	12 months
Weight:	25 kg
What's included?:	EZ1031 Phosphate Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets and 1 x empty 2.5L Reagent Container with Fittings (for Colour Solution)

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