



## EZ1024 Iron Analyser Fe(II+III)

**Product #:** EZ1024.XXXXXXXXXX  
**AED Price:** Contact Hach

### Online colorimetric analysis of total dissolved Iron Fe(II+III) in water

EZ1000 Iron 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 intervention. 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 Iron 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.

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### 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 Fe (II), Fe total dissolved (dilution + 5 min.)

	15 min all combined parameters
Demineralised water:	For rinsing / dilution
Detection limit:	$\leq 2 \mu\text{g/L}$
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. $\varnothing$ 32 mm
Earth connection:	Dry and clean earth pole with low impedance ( $< 1 \text{ Ohm}$ ) using an earth cable of $> 2.5 \text{ mm}^2$
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:	Metal ions like Lead $> 10 \text{ mg/L}$ , Zinc $> 2 \text{ mg/L}$ , Nickel $> 2 \text{ mg/L}$ , Iron $> 5 \text{ mg/L}$ , Copper $> 5 \text{ mg/L}$ . Strong oxidising agents, Cyanide, Nitrite, Phosphate (polyphosphate more than orthophosphate), Chromium, Zinc in concentrations exceeding 10 times that of Iron. Bismuth, Cadmium, Mercury, Molybdate, and Silver precipitate Phenanthroline. Polyphosphate must be absent. Large amounts of colour and turbidity interfere. Fats, pil, proteins,surfactants and tar.
Material:	Hinged part: Thermoform ABS, door: PMMA
	Wall section: Galvanised steel, powder coated
Measurement method:	Colorimetric measurement using TPTZ colour solution, conform with APHA 3500-Fe (B)
Measuring range:	0.01 - 1 mg/L Fe(II)
	Optional:
	0.005 - 0.25 mg/L
	0.005 - 0.5 mg/L
	0.08 - 4 mg/L (with internal dilution)
	0.16 - 8 mg/L (with internal dilution)
	2 - 100 mg/L (with internal dilution)
Model:	EZ1024
Number of sample streams:	1, 2, 4, or 8
Parameter:	Iron Fe(II+III), total 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 between 10 - 30 °C
Sample pressure:	By external overflow vessel
Sample quality:	Maximum particle size 100 $\mu\text{m}$ , $< 0.1 \text{ g/L}$ ; Turbidity $< 50 \text{ NTU}$
Sample temperature:	5 - 30 °C
Validation:	Automatic; frequency freely programmable
Warranty:	24 months
Weight:	25 kg
What's included?:	EZ1024 Iron Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets, 2 x empty 5L Reagent Container with Fittings (for Buffer & Reductor Solution) and 1 x empty 2.5L Glass Reagent Container with Fittings (for Colour Solution)

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