

## **EZ2001 Total Chromium Analyser**



**Product #:** ZAR Price: EZ2001.XXXXXXXXX Contact Hach

## Online colorimetric analysis of Total Chromium in water

EZ2000 Total Chromium 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.

EZ2000 Total Chromium Analysers have an internal digestion unit. This additional step prior to analysis allows to measure non-soluble or complexed metal species.

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 Total Chromium 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

| 1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts |
|---|
| 10 - 30 °C ±4 °C deviation at 5 - 95% relative humidity (non-condensing)              |
| Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)                       |
| Yes   |
| Automatic, 2-point; frequency freely programmable                                     |
|   |

| Certifications:                 | CE compliant / UL certified  |
|---------------------------------|--|
| Cooling water:                  | Flow rate approx. 5 L/h; temperature max. 30 °C; pressure max. 0.5 bar   |
| Cycle Time:                     | 20 minutes Total Cr (dilution + 5 min.)  |
| -                               | 20 minutes Total Cr. & Cr(VI)  |
| Demineralised water:            | 30 minutes Total Cr & Cr(VI)<br>For rinsing / dilution   |
|                                 |  |
| Digital outputs:                | Optional: Modbus (TCP/IP, RS485)<br>690 mm x 465 mm x 330 mm   |
| Dimensions (H x W x D):         |  |
| 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:                  | Iron (III), mercury > 200 mg/L, molybdenum > 200 mg/L, vanadium > 5 mg/L. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar. |
| Lower Limit of Detection (LOD): | $\leq 2 \ \mu g/L$   |
| Material:                       | Hinged part: Thermoform ABS, door: PMMA  |
|                                 | Wall section: Galvanised steel, powder coated  |
| Measurement method:             | Colorimetric measurement at 546 nm using diphenylcarbazide method, conform with standard method APHA 3500-Cr (B)   |
| Measuring range:                | 10 - 500 μg/L Cr   |
|                                 |  |
|                                 | Optional:  |
|                                 | 2 - 50 µg/L  |
|                                 | 4 - 125 μg/L   |
|                                 | 5 - 250 μg/L   |
|                                 | 0.16 - 2 mg/L (with internal dilution)   |
|                                 | 0.32 - 5 mg/L (with internal dilution)   |
|                                 | 1 - 10 mg/L (with internal dilution)   |
| Model:                          | EZ2001   |
| Number of sample streams:       | 1, 2, 4 or 8   |
| Parameter:                      | Chromium, total  |
| Power:                          | 230 VAC, 50/60 Hz  |
|                                 | 120 VAC, 50/60 Hz  |
|                                 | Max. power consumption: 440 VA   |
| Precision:                      | Better than 2% full scale range for standard test solutions  |
| Protection Class:               | Analyser cabinet: IP44 / Panel PC: IP65  |
|                                 | 10 - 500 μg/L Cr   |
| Range:                          |  |
| 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?: | EZ2001 Chromium Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting<br>Brackets, 3 x empty 2.5L Reagent Containers with Fittings (for Acid, Persulphate & Buffer<br>Solution) and 1 x empty 2.5L Glass Reagent Container with Fittings (for Colour Solution) |

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