EZ1000 Series Online Colorimetric Zinc Analyser

Applications

- Wastewater
- Drinking Water
- Surface Water



Online colorimetric analysis of dissolved Zinc in water

Results you can rely on

EZ1000 Zinc 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.

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 Zinc 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

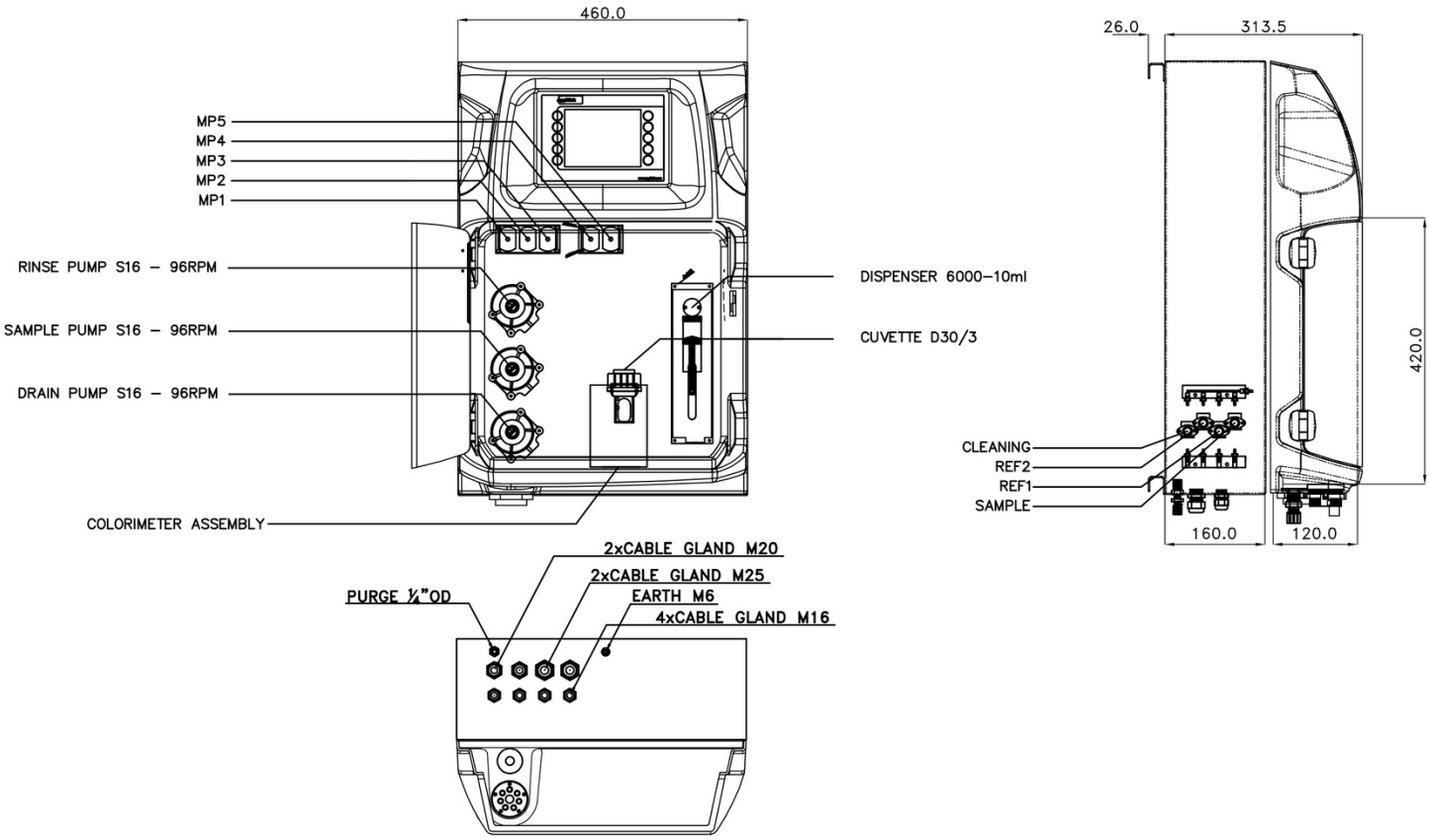
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Technical Data*

Parameter	Zinc Zn(II), dissolved
Measurement method	Colorimetric measurement at 630 nm using Zincon, conform with standard method APHA 3500-Zn (B)
Measuring range	0.05 - 1 mg/L Zn(II) Optional: 0.01 - 0.1 mg/L 0.025 - 0.25 mg/L 0.025 - 0.5 mg/L 0.4 - 4 mg/L (with internal dilution) 0.8 - 8 mg/L (with internal dilution) 5 - 100 mg/L (with internal dilution)
Precision	Better than 2% full scale range for standard test solutions
Detection limit	≤ 10 µg/L
Interferences	Aluminium (III) > 5 mg/L, Cadmium (II) > 1 mg/L, Chromate > 50 mg/L, Chromium (III) > 10 mg/L, Cobalt (II) > 30 mg/L, Copper (II) > 30 mg/L, Iron (II) > 9 mg/L, Iron (III) > 7 mg/L, Manganese (II) > 5 mg/L, Nickel (II) > 5 mg/L, organic matter and extreme sample pH fluctuation. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Cycle time	10 min (dilution + 5 min)
Automatic cleaning	Yes
Calibration	Automatic, 2-point; frequency freely programmable
Validation	Automatic; frequency freely programmable
Ambient temperature	10 - 30 °C ± 4 °C deviation at 5 - 95% relative humidity (non-condensing)
Reagent requirements	Keep between 10 - 30 °C
Sample pressure	By external overflow vessel
Flow rate	100 - 300 mL/min
Sample temperature	10 - 30 °C
Sample quality	Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU
Power	100 - 240 VAC, 50/60 Hz Max. power consumption: 120 VA
Instrument air	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Demineralised water	For rinsing / dilution
Drain	Atmospheric pressure, vented, min. Ø 64 mm
Earth connection	Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm^2
Analogue outputs	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)
Digital outputs	Optional: Modbus (TCP/IP, RS485)
Alarm	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts
Protection class	Analyser cabinet: IP44 / Panel PC: IP65
Material	Hinged part: Thermoform ABS, door: PMMA Wall section: Galvanised steel, powder coated
Dimensions (H x W x D)	690 mm x 465 mm x 330 mm
Weight	25 kg
Certifications	CE compliant / ETL certified

**Subject to change without notice.*

Dimensions



Hach Service

With Hach Service, you have a global partner who understands your needs and cares about delivering timely, high-quality service you can trust. Our Service Team brings unique expertise to help you maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

Order Information - Part Number Configurator

Zn (II), 0.05 - 1 mg/L	EZ1040.52	X	X	X	X	X	2
Measurement range settings / Dilution options							
10% of standard range		A					
25% of standard range		B					
50% of standard range		C					
Standard range		0					
Internal micropump dilution (factor 4)		1					
Internal micropump dilution (factor 8)		2					
Internal dispenser dilution (max. factor 100)		5					
Power supply							
Standard 100 - 240 VAC, 50/60 Hz			0				
Number of sample streams							
1 stream				1			
2 streams				2			
4 streams				4			
8 streams				8			
Outputs							
1x mA					1		
2x mA					2		
4x mA					4		
8x mA					8		
1x mA + Modbus RS485					E		
2x mA + Modbus RS485					F		
4x mA + Modbus RS485					H		
8x mA + Modbus RS485					P		
1x mA + Modbus TCP/IP					I		
2x mA + Modbus TCP/IP					J		
4x mA + Modbus TCP/IP					L		
8x mA + Modbus TCP/IP					T		
No adaption, standard version						0	

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