

# EZ1000 Series Online Colorimetric Hydrogen Peroxide Analyzer

## Applications

- Wastewater
- Drinking water
- Steam & power generation
- Process water
- Surface water



## Online colorimetric analysis of Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>) in water

### Results you can rely on

EZ1000 Hydrogen Peroxide Analyzers 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, maximized uptime and negligible operator intervention. Precision micropumps dose all reagents. Sample lines and analysis vessel are cleaned with demineralized water to eliminate cross contamination between samples. Electronic and wet-chemical part of the analyzer are strictly separated. A transparent door allows for instant visual inspection of the wet part.

### Flexibility that meets your needs

EZ Series Hydrogen Peroxide Analyzers 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 analyzer to match your application and operational needs.

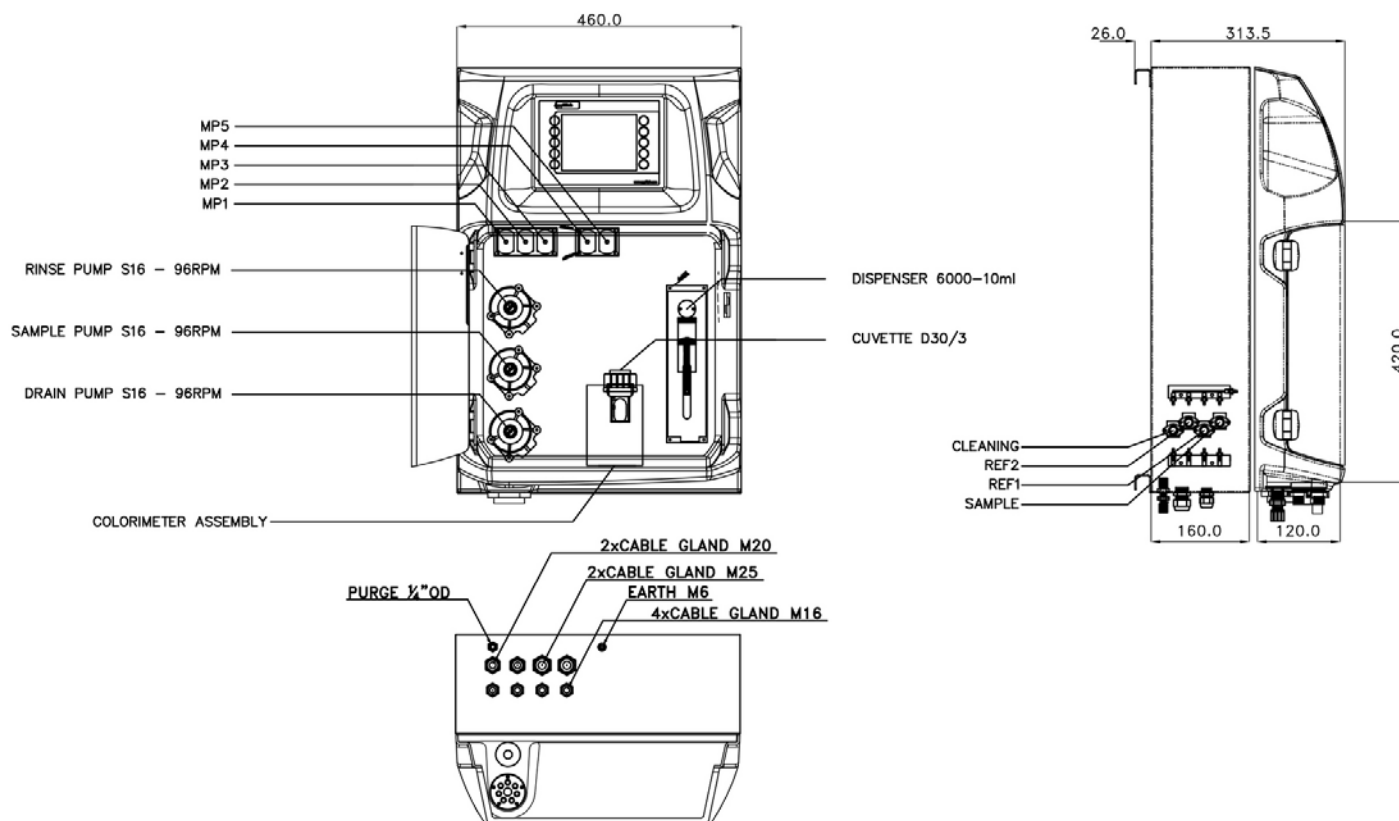
- The standard measuring range can be narrowed by a different calibration range or extended via internal dilution options.
- Analog and digital output options
- Multiple stream analysis for up to 8 sample streams

## Technical Data\*

<b>Parameter</b>	Hydrogen Peroxide H <sub>2</sub> O <sub>2</sub>
<b>Measurement method</b>	Colorimetric measurement at 510 nm using DPD
<b>Measuring range</b>	0 - 500 µg/L H <sub>2</sub> O <sub>2</sub> Optional: 0 - 125 µg/L 0 - 250 µg/L 0 - 2.0 mg/L (with internal dilution) 0 - 4.0 mg/L (with internal dilution) 0 - 50 mg/L (with internal dilution)
<b>Precision</b>	Better than 2% full scale range for standard test solutions
<b>Detection limit</b>	≤ 1 µg/L
<b>Interferences</b>	Oxidants like Bromine, Bromamine, Chlorine, Copper Cu(II) > 8 mg/L, Chromate, Iodine, Iodoamines, Iron Fe(III) > 20 mg/L, Nitrite, Ozone and Manganese may oxidize the DPD color solution. Large amounts of color and turbidity interfere. Fats, oil, proteins, surfactants and tar.
<b>Cycle time</b>	10 min (dilution + 5 min.)
<b>Automatic cleaning</b>	Yes
<b>Calibration</b>	Automatic, 2-point; frequency freely programmable
<b>Validation</b>	Automatic; frequency freely programmable
<b>Ambient temperature</b>	10 - 30 °C ± 4 °C deviation at 5 - 95% relative humidity (non-condensing)
<b>Reagent Requirements</b>	Keep refrigerated.
<b>Sample pressure</b>	By external overflow vessel
<b>Flow rate</b>	100 - 300 mL/min
<b>Sample temperature</b>	10 - 30 °C
<b>Sample quality</b>	Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU
<b>Power</b>	110 - 240 VAC, 4 A, 50/60 Hz; max. power consumption: 150 VA
<b>Instrument air</b>	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
<b>Demineralized water</b>	For rinsing and/or dilution
<b>Drain</b>	Atmospheric pressure, vented, min. Ø 64 mm
<b>Earth connection</b>	Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm <sup>2</sup>
<b>Analogue outputs</b>	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)
<b>Digital outputs</b>	Optional: RS232, Modbus (TCP/IP, RS485)
<b>Alarm</b>	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts
<b>Protection class</b>	Analyzer cabinet: IP55 / Panel PC: IP65
<b>Material</b>	Hinged part: Thermoform ABS, door: plexiglass Wall section: Galvanised steel, powder coated
<b>Dimensions (H x W x D)</b>	690 mm x 465 mm x 330 mm
<b>Weight</b>	25 kg
<b>Certifications</b>	CE compliant / UL certified

\*Subject to change without notice.

## Dimensions



## Be confident with Hach Service

**Start-Up/Commissioning:** Our service technicians visit your site and setup instrumentation, provide basic end-user training on operations and maintenance, and validate settings and performance to get you started.

**Service Agreement:** Hach provides on-site and in-factory repair, preventive maintenance, and calibration programs for your instruments to ensure reliability and instrument up-time. We have services to fit your specific needs.

## Order Information - Part Number Configurator

Hydrogen peroxide, 0 - 500 µg/L H <sub>2</sub> O <sub>2</sub>	EZ1022.99	X	X	X	X	X	2
<b>Measurement range settings / Dilution options</b>							
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					
Customized		Z					
<b>Power supply</b>							
Standard 110 - 240 VAC; 50/60 Hz			0				
Customized			Z				
<b>Number of sample streams</b>							
1 stream				1			
2 streams				2			
3 streams				3			
4 streams				4			
5 streams				5			
6 streams				6			
7 streams				7			
8 streams				8			
<b>Outputs</b>							
1x mA					1		
2x mA					2		
3x mA					3		
4x mA					4		
5x mA					5		
6x mA					6		
7x mA					7		
8x mA					8		
RS232					A		
Modbus TCP/IP					B		
Modbus RS485					C		
1x mA + Modbus RS485					E		
2x mA + Modbus RS485					F		
3x mA + Modbus RS485					G		
4x mA + Modbus RS485					H		
1x mA + Modbus TCP/IP					I		
2x mA + Modbus TCP/IP					J		
3x mA + Modbus TCP/IP					K		
4x mA + Modbus TCP/IP					L		
Customized / combined					Z		
<b>Specials</b>							
No adaption, standard version						0	
Customer specific adaptations required, to specify						S	