EZ1000 Series
Online Colorimetric
Sulfide Analyzer

Online colorimetric analysis of Sulfide in water

Results you can rely on

EZ1000 Sulfide 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 invervention. 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 Sulfide 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.
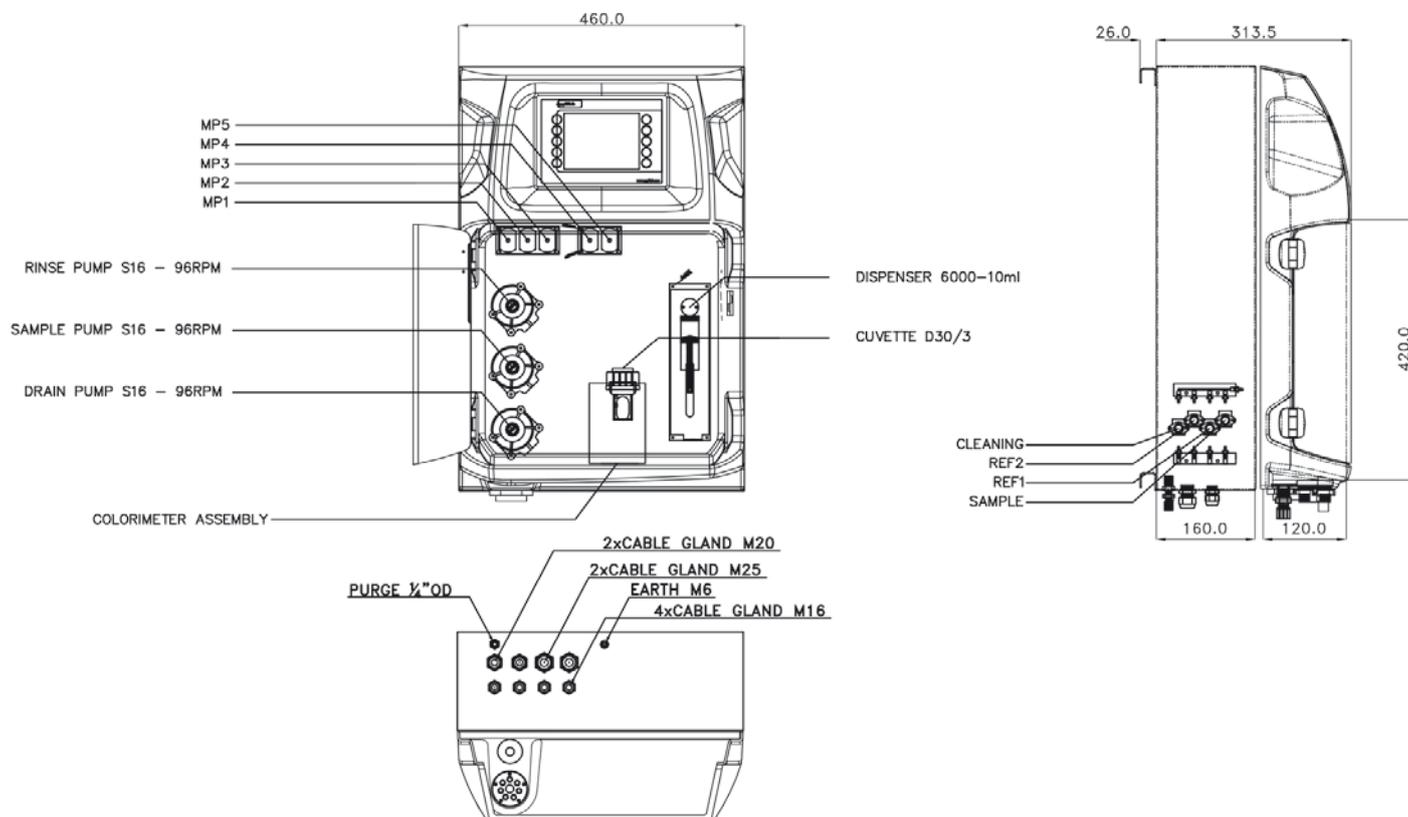
- The standard measuring range can be extended via internal dilution options.

- Analog and digital output options

- Multiple stream analysis for up to 8 sample streams

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Technical Data*

Parameter	Sulfide
Measurement method	Colorimetric measurement at 670 nm using N,N-dimethyl-p-phenylenediamine dihydrochloride (NNDP), conform with standard method ASTM 4500-S2-D
Measuring range	50 - 500 µg/L S^{2-} Optional: 0.2 - 2 mg/L (with internal dilution) 0.4 - 4 mg/L (with internal dilution) 5 - 50 mg/L (with internal dilution)
Precision	Better than 2% full scale range for standard test solutions
Detection limit	≤ 50 µg/L
Interferences	Strong reducing agents like Hydrosulphide, Nitrite > 0.2 mg/L, Sulfite > 200 mg/L and Thiosulfate > 5 mg/L interfere by reducing the blue color. Oxygen reacts with Sulfide and must be avoided. Large amounts of color and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Cycle time	15 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	110 - 240 VAC, 4 A, 50/60 Hz; max. power consumption: 150 VA
Instrument air	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Demineralized water	For rinsing and/or 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: RS232, Modbus (TCP/IP, RS485)
Alarm	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts
Protection class	Analyzer cabinet: IP55 / Panel PC: IP65
Material	Hinged part: Thermoform ABS, door: plexiglass 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 / UL certified

Subject to change without notice.

Dimensions

MP5
MP4
MP3
MP2
MP1

RINSE PUMP S16 — 96RPM

SAMPLE PUMP S16 — 96RPM

DRAIN PUMP S16 — 96RPM

COLORIMETER ASSEMBLY

DISPENSER 6000—10ml

CUVETTE D30/3

CLEANING
REF2
REF1
SAMPLE

PURGE ¼"OD

2xCABLE GLAND M20
2xCABLE GLAND M25
EARTH M6
4xCABLE GLAND M16

460.0
26.0
313.5
420.0
160.0
120.0

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

Sulfide, 50 - 500 µg/L S^{2-}	EZ1037.99	X	X	X	X	X	2
Measurement range settings / Dilution options							
Standard range		0					
Internal micropump dilution (factor 4)		1					
Internal micropump dilution (factor 8)		2					
Internal dispenser dilution (max. factor 100)		5					
Customized		Z					
Power supply							
Standard 110 - 240 VAC; 50/60 Hz			0				
Customized			Z				
Number of sample streams							
1 stream				1			
2 streams				2			
3 streams				3			
4 streams				4			
5 streams				5			
6 streams				6			
7 streams				7			
8 streams				8			
Outputs							
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		
Specials							
No adaption, standard version						0	
Customer specific adaptions required, to specify						S	

DOC053.52.35282.Jan20

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