# EZ3500 Series Sulphide Analysers

#### **Applications**

- Wastewater
- Process water



## Online ion-selective Sulphide measurements with standard addition for industrial applications

#### **ISE technology for complex water matrices**

The EZ3500 Series are used for water monitoring applications where ion-selective electrodes are the preferred analytical technique, but the water matrix is complex. Standard addition helps minimise matrix interferences that otherwise might contribute to the output signal of the electrode.

#### Discontinuous, automatic standard addition

The EZ3500 Series run discontinuous measurements with careful addition of a known standard in an analysis vessel. Discontinuous ISE analysis enhances control over the potentiometry, eliminates cross-contamination between cycles and reduces overall reagent consumption.

The EZ3500 Series combine unique technology with a set of analysis, control and communication features in an industrial analyser mainframe designed for the highest performance:

- Smart automatic features
- Control and communication via industrial panel PC
- Analogue and digital output options
- Multiple stream analysis (up to 8 streams)

With the EZ3518 (1-10 mg/L), the EZ3519 (10-100 mg/L) and the EZ3520 (100-1000 mg/L) there is a selection of measuring ranges to match your application needs.

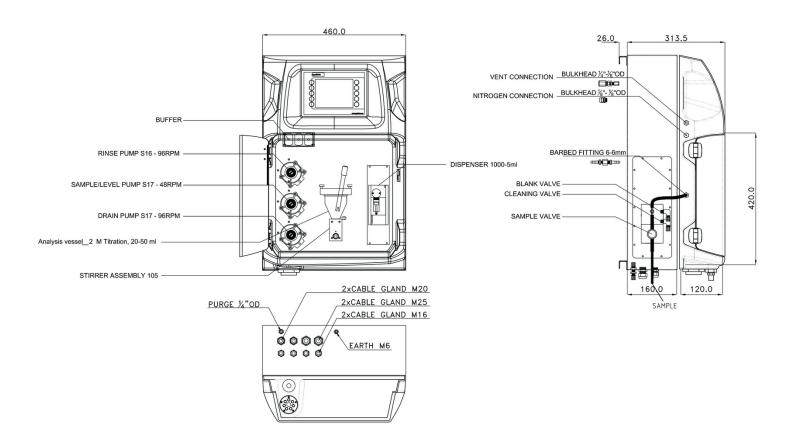


#### **Technical Data\***

Parameter	Sulphide					
Measurement method	Discontinuous measurement by combined ion-selective electrode with standard addition, conform with standard method ASTM D4658-15 (direct ISE)					
Measuring range	1 - 10 mg/L S <sup>2-</sup> 10 - 100 mg/L S <sup>2-</sup> 100 - 1,000 mg/L S <sup>2-</sup>					
Precision	Better than 2% full scale range for standard test solutions					
Detection limit	≤ 1 mg/L					
Interferences	Silver and mercury have very high interference and can only be tolerated in very low concentrations relative to the sulphide - ideally they should be absent. Fats, oil, proteins, surfactants and tar.					
Cycle time	8 minutes					
Automatic cleaning	Yes					
Calibration	Automatic, 2-point; frequency freely programmable					
Validation	Automatic; frequency freely programmable					
Ambient temperature	10 - 30 °C $\pm$ 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					
Demineralised water	For rinsing purposes (application depending)					
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 <sup>2</sup>					
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	Analyser 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**



#### **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**

Standard range, 1-10 mg/L S <sup>2-</sup> Standard range, 10-100 mg/L S <sup>2-</sup> Standard range, 100-1,000 mg/L S <sup>2-</sup>	EZ3518.99 EZ3519.99 EZ3520.99	х	x	x	х	x	2
Measurement range settings / Dilution opti	ons	5					
25% of standard range		В					
50% of standard range		С					
Standard range		0					
Customised		Z					
Power supply							
Standard 110 - 240 VAC; 50/60 Hz			0				
Customised			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			
				O			
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					А		
Modbus TCP/IP					В		
Modbus RS485					С		
1x mA + Modbus RS485					Е		
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		
Customised / combined					Z		
Specials							
No adaption, standard version						0	

