Applications

Wastewater

EZ3500 Series Ammonium Analyzers



Online ion-selective Ammonium 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 specifically for complex water matrices such as industrial effluent. Standard addition is used to minimize matrix interferences that may 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 combines unique technology with a set of analysis, control and communication features in an industrial analyzer mainframe designed for the highest performance:

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

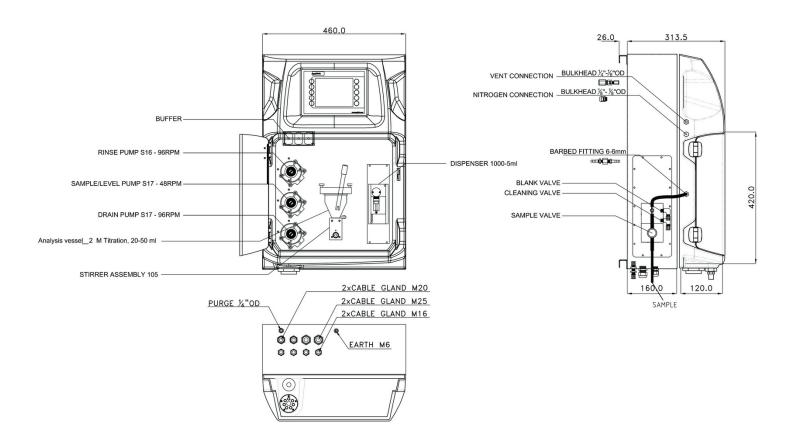


Technical Data*

Model	EZ3500	EZ3501	EZ3502					
Parameter	Ammonium	Ammonium	Ammonium					
Range	1 - 10 mg/L NH ₄ -N Optional: 0.25 - 2.5 mg/L NH ₄ -N 0.5 - 5 mg/L NH ₄ -N	5 - 100 mg/L NH ₄ -N Optional: 1 - 25 mg/L NH ₄ -N 2.5 - 50 mg/L NH ₄ -N	50 - 1000 mg/L NH ₄ -N Optional: 10 - 250 mg/L NH ₄ -N 25 - 500 mg/L NH ₄ -N					
Lower Limit of Detection (LOD)	≤ 0.25 mg/L	≤ 1 mg/L	≤ 10 mg/L					
Precision	Better than 2% full scale range for standard test solutions							
Measurement Method	Discontinuous measurement by combined ion-selective electrode with standard addition, conform with standard method APHA 4500-NH3 (E)							
Interferences	Volatile amines interfere. 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 ± 4 °C deviation at 5 - 95% relative humidity (non-condensing)							
Reagent Requirements	Keep between 10 - 30 °C (50 - 86 °F)							
Sample Pressure	By external overflow vessel							
Sample Flow Rate	100 - 300 mL/min							
Sample Temperature	10 - 30 °C (50 - 86 °F)							
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							
Demineralized Water	For rinsing							
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 $> 2.5 \ \text{mm}^2$							
Analog Outputs	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)							
Digital Outputs	Optional: RS232, Modbus (TCP/IP, RS485)							
Alarm	1x malfunctioning, 4x user-configurable, max. 24 VDC/0.5 A, potential free contacts							
Protection Class	Ar	Analyzer cabinet: IP55 / Panel PC: IP65						
Material	Hinged part: Thermoform ABS, door: plexiglass Wall section: Galvanized steel, powder coated							
Dimensions (H x W x D)	690 mm x 465 mm x 330 mm							
Weight	25 kg (55 lbs.)							
Certifications	CE compliant / UL 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 maximize instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

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Order Information - Part Number Configurator

Measurement range settings / Dilution options	Standard range, 1-10 mg/L NH ₄ -N Standard range, 5-100 mg/L NH ₄ -N	EZ3500.99 EZ3501.99	х	х	x	x	x	2
25% of standard range		EZ3502.99						
25% of standard range		'						
Standard range	Measurement range settings / Dilution opti	ions						
Standard range	25% of standard range		В					
Number of sample streams	50% of standard range		С					
Standard 100 - 240 VAC, 50/60 Hz	Standard range		0					
Standard 100 - 240 VAC, 50/60 Hz	Power supply							
1 streams				0				
1 stream 1 2 streams 2 2 3 3 4 streams 3 3 4 streams 4 4 5 streams 5 5 6 5 6 5 6 6 7 5 streams 5 5 6 6 7 7 streams 6 7 7 streams 7 7 8 streams 8 8 5 6 5 6 6 7 7 streams 7 7 8 streams 7 7 8 streams 8 7 7 8 streams 8 7 7 8 streams 8 7 7 8 8 streams 8 8 7 7 8 8 streams 8 8 7 7 8 8 streams 8 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	Number of sample streams							
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