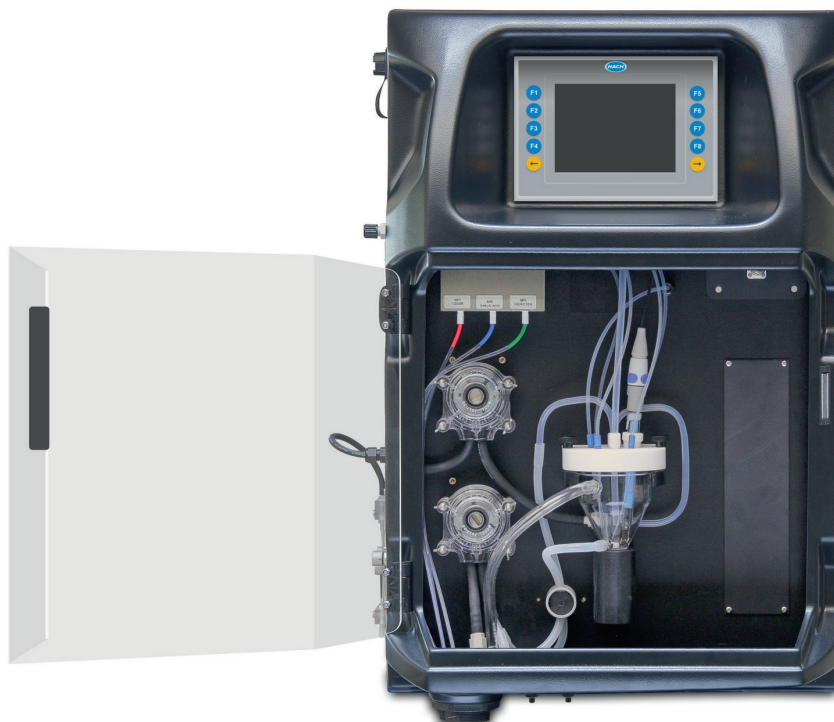


EZ3500 Series Ammonium Analysers

Applications

- Wastewater



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 minimise 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 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)

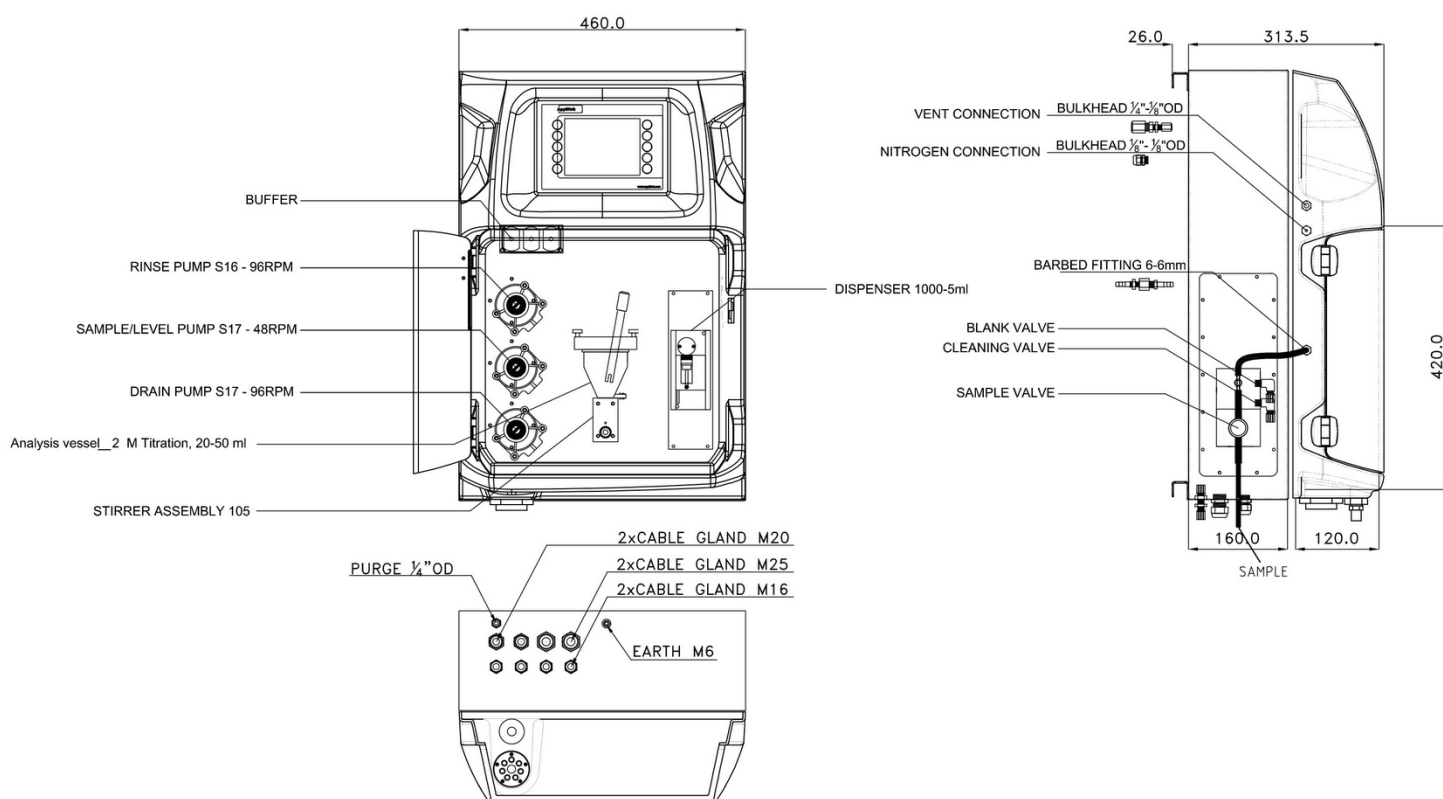
With the EZ3500 (1-10 mg/L NH₄-N), the EZ3501 (10-100 mg/L NH₄-N) and the EZ3502 (100-1000 mg/L NH₄-N) there is a selection of measuring ranges available to match your application needs.

Technical Data*

Parameter	Ammonium
Measurement method	Discontinuous measurement by combined ion-selective electrode with standard addition, conform with standard method APHA 4500-NH ₃ (E)
Measuring range	1 - 10 mg/L NH ₄ -N 10 - 100 mg/L NH ₄ -N 100 - 1,000 mg/L NH ₄ -N
Precision	Better than 2% full scale range for standard test solutions
Detection limit	≤ 1 mg/L (range 1 - 10 mg/L)
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
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 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	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 NH ₄ -N	EZ3500.99						
Standard range, 10-100 mg/L NH ₄ -N	EZ3501.99	X	X	X	X	X	2
Standard range, 100-1,000 mg/L NH ₄ -N	EZ3502.99						
Measurement range settings / Dilution options							
25% of standard range (only EZ3501 & EZ3502)		B					
50% of standard range		C					
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		
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	
Customised / combined						Z	
Specials							
No adaption, standard version							0
Customer specific adaptations required, to specify							S