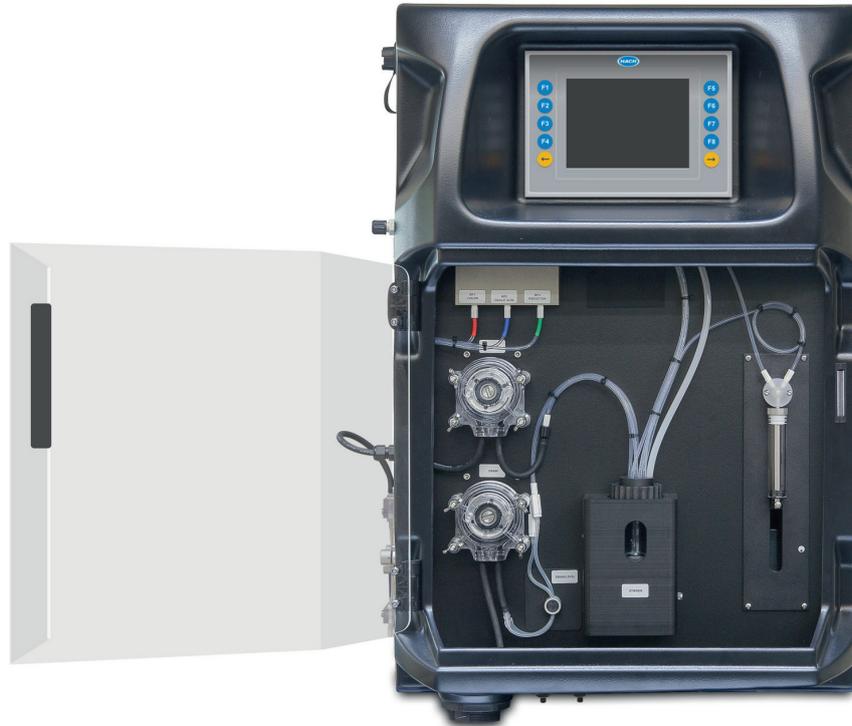


EZ1000 Series Ammonium Analysers

Applications

- Wastewater
- Drinking water
- Power and steam generation
- Surface water



Online colorimetric Ammonium measurements in industrial and environmental applications

Excellent analytical performance

The EZ1000 Series online analysers stem from many years of analytical expertise and application knowledge in colorimetry. At the heart of the analysers there is a compact photometer assembly. Consumption of reagents is reduced by low volume analysis, yet high sensitivity ($\mu\text{g/L}$ range) is assured by a long optical path length.

Since their introduction EZ Series Analysers have served in hundreds of industrial and municipal applications. The flexible analyser mainframe allows a perfect online duplicate of standard laboratory wet-chemical methods, with outstanding precision and accuracy

The EZ1000 Series combine unique technology with a set of analysis, control and communication features in an industrial analyser mainframe designed for the highest performance:

- Standard measuring ranges with optional internal dilution
- Smart automatic features
- Control and communication via industrial panel PC
- Analogue and digital output options
- Multiple stream analysis (up to 8 streams)

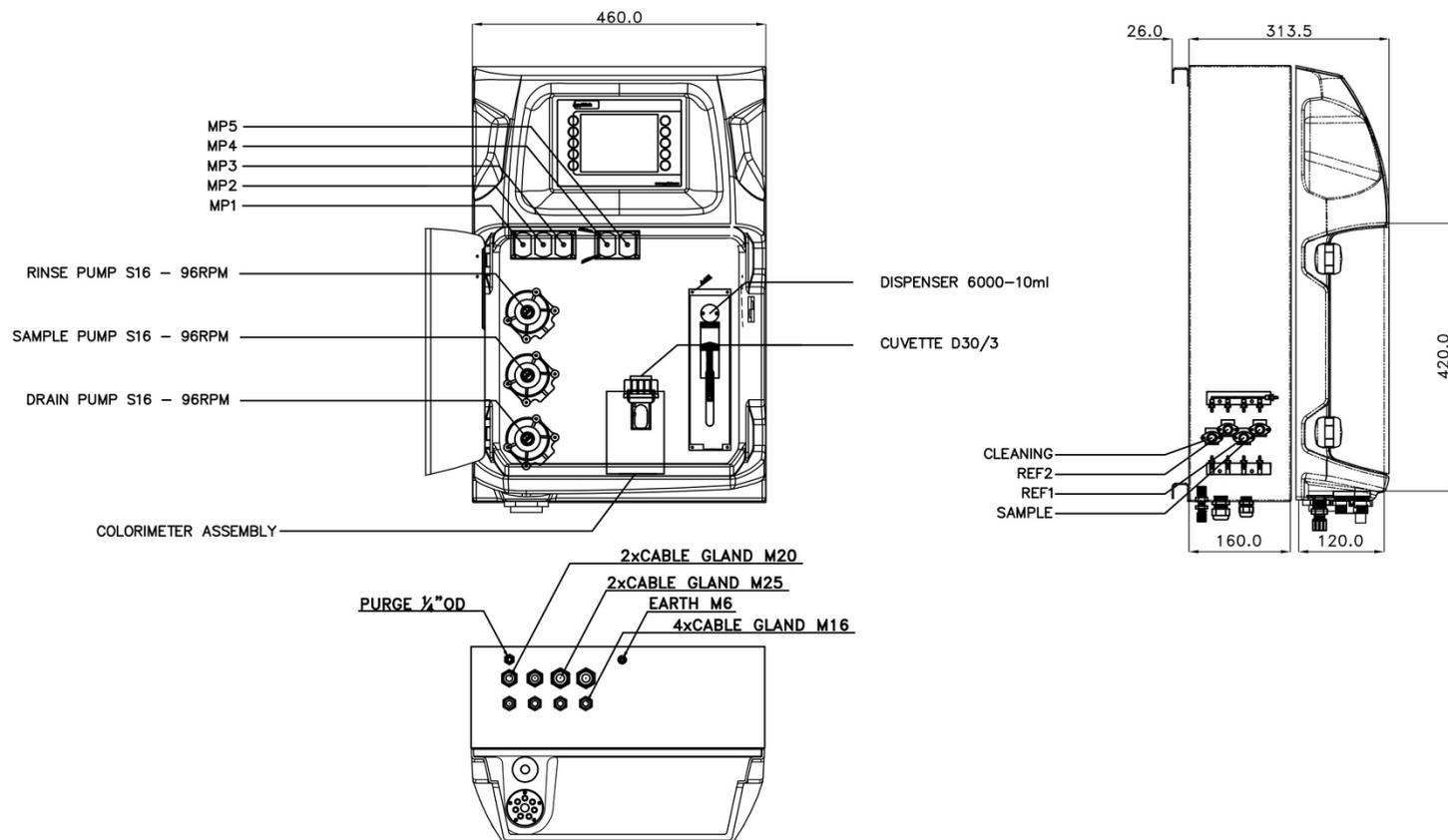
There are two models available: the EZ1002 uses the Berthelot method with a standard measuring range of 0-1 mg/L. The EZ1003 uses the Nessler method with a standard measuring range of 0-2 mg/L.

Technical Data*

Model	EZ1002	EZ1003
Measurement method	Colorimetric measurement at 630 nm based on standard method APHA 3500-NH ₃ (Berthelot)	Colorimetric measurement at 450 nm conform with standard method EPA 350.1 (Nessler)
Measuring range	0 - 1 mg/L NH ₄ -N	0 - 2 mg/L NH ₄ -N
Precision	Better than 2% full scale range for standard test solutions	Better than 2% full scale range for standard test solutions
Detection limit	≤ 5 µg/L	≤ 250 µg/L
Interferences	Amino acids, hydrazine and urea. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.	Acetone, alcohols, aldehydes, aliphatic and aromatic amines, chlorine, glycine, organic chloramines and sulphide. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Cycle time	25 minutes (dilution + 5 min)	6 minutes (dilution + 5 min)
Parameter	Ammonium	
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 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	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

Berthelot method, 0-1 mg/L NH ₄ -N	EZ1002.99	X	X	X	X	X	2
Nessler method, 0-2 mg/L NH ₄ -N	EZ1003.99						
Measurement range settings / Dilution options							
10% of standard range		A					
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					
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