



EZ sc Series Ammonium Analyzer - EZ1102sc

Applications

- Wastewater
- Drinking Water
- Power Generation
- Surface Water



Online colorimetric analysis of Ammonium in water

The EZ sc Series of online analyzers delivers robust, efficient, and future-ready solutions for facilities striving to maximize operational uptime and meet evolving demands. Engineered with precision and backed by expert support, EZ sc systems integrate flexibility, providing durable performance, intuitive tools, and the ability to scale, all while minimizing downtime and maintenance requirements.

Trusted Equipment for Critical Operations

The EZ sc Series combines robust engineering with high-quality materials to ensure reliability 24/7. Designed for long-term performance, EZ sc Series minimizes breakdowns and supports sustained operational success.

Scalable Solutions for Growing Needs

Built to evolve alongside your needs, online analyzers from the EZ sc Series offer adaptable parameters and easier integration. They ensure your facility remains future proof without requiring expensive upgrades. Easily adjust parameter testing ranges and expand sample streams to accommodate innovation and growth.

Real-Time Data for Faster Decisions

The EZ sc Series offers advanced connectivity and real-time monitoring, delivering immediate access to actionable insights. Facilities utilizing this technology benefit from improved reaction times, empowering more informed decision-making and quicker responses during critical situations.

Simplified Troubleshooting with Expert Support

Built-in diagnostics combined with secure remote data access make the EZ sc Series simplify issue resolution. Supported by a highly responsive team of experts, it ensures uninterrupted functionality and minimizes operational downtime. By addressing and identifying issues early, EZ sc Series of online analyzers helps prevent costly disruptions and repairs while maintaining system efficiency.

Clear Workflows for Predictable Outcomes

Standardized tools and guided workflows ensure consistent implementation and operation. The EZ sc Series minimizes miscommunication, sets clear expectations, and reduces process inconsistencies, driving greater efficiency.

Technical Data*

Model	EZ1102sc
Parameter	Ammonium
Measurement Method	Colorimetric measurement at 630 nm based on standard method APHA 3500-NH3 (Berthelot)
Range	0.005 - 0.1 mg/L NH ₄ -N 0.01 - 0.25 mg/L NH ₄ -N 0.01 - 0.5 mg/L NH ₄ -N 0.025 - 1.0 mg/L NH ₄ -N 0.125 - 5.0 mg/L NH ₄ -N (with internal dilution) 0.25 - 10 mg/L NH ₄ -N (with internal dilution) 1 - 25 mg/L NH ₄ -N (with internal dilution) 1.25 - 50 mg/L NH ₄ -N (with internal dilution) 2 - 75 mg/L NH ₄ -N (with internal dilution) 2.5 - 100 mg/L NH ₄ -N (with internal dilution)
Precision	Better than 2% full scale range for standard test solutions
Lower Limit of Detection (LOD)	≤ 5 µg/L
Interferences	Amino acids, hydrazine and urea. Large amounts of color and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Cycle Time	25 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 (50 - 86 °F ± 7.2 °F 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 / dilution
Drain	Atmospheric pressure, vented, min. Ø 32 mm
Earth Connection	Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm ²
Analog Outputs	Active 4 - 20 mA max. 500 Ohm load, standard 4, max. 8 (option)
Digital Outputs	Optional: Modbus (TCP/IP, RTU), Profinet, Profibus DP, Ethernet IP
Alarm	Malfunction, maintenance, analyser busy
Protection Class	Analyzer cabinet: IP44 / Panel PC: IP65
Material	Hinged part: Thermoform ABS, door: plexiglass Wall section: Galvanized steel, powder coated
Dimensions (H x W x D)	688 mm x 460 mm x 340 mm
Weight	88 lbs.
Certifications	CE compliant / ETL certified

*Subject to change without notice.

Dimensions



Enable the Benefits of Smart Monitoring

This instrument connects to Claros, Hach's innovative Water Intelligence System. Claros allows you to seamlessly connect and manage instruments, data, and process – anywhere, anytime. The result is greater confidence in your data and improved efficiencies in your operations. To unlock the full potential of Claros, insist on Claros Enabled instruments.

Hach Service Protects Your Investment

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.

Order Information - Part Number Configurator

EZ1102.97	X	X	X	X	X
Measurement range					
0.005 - 0.1 mg/L NH ₄ -N	0				
0.01 - 0.25 mg/L NH ₄ -N					
0.01 - 0.5 mg/L NH ₄ -N					
0.025 - 1.0 mg/L NH ₄ -N					
0.125 - 5.0 mg/L NH ₄ -N (with internal dilution)	V				
0.25 - 10 mg/L NH ₄ -N (with internal dilution)					
1 - 25 mg/L NH ₄ -N (with internal dilution)					
1.25 - 50 mg/L NH ₄ -N (with internal dilution)					
2 - 75 mg/L NH ₄ -N (with internal dilution)					
2.5 - 100 mg/L NH ₄ -N (with internal dilution)					
Power supply					
100 - 240 VAC, 50/60 Hz		0			
Number of sample streams					
1 stream			1		
Outputs					
4x mA				4	
8x mA				8	
4x mA + Modbus RTU				D	
8x mA + Modbus RTU				E	
4x mA + Modbus TCP/IP				I	
8x mA + Modbus TCP/IP				J	
4x mA + Profinet				N	
8x mA + Profinet				O	
4x mA + Profibus DP				S	
8x mA + Profibus DP				T	
4x mA + Ethernet/IP				X	
8x mA + Ethernet/IP				Y	
No adaption, "SC4500" version					OT

Accessories

- APPAZ0080002 - Moduplex, 2 streams, Pinch Valve, 1/8" OD
 APPAZ0080004 - Moduplex, 4 streams, Pinch Valve, 1/8" OD
 APPAZ0080008 - Moduplex, 8 streams, Pinch Valve, 1/8" OD

