



# EZ1102 Ammonium Analyser (Berthelot Method)

**Product #:** AED Price: EZ1102.XXXXXXXX Contact Hach

### Online colorimetric analysis of Ammonium in water

EZ1000 Ammonium Analysers achieve excellent precision and accuracy. At the heart of the colorimeter there is a compact photometer assembly developed especially for the EZ Series. Consumption of reagents is reduced by low volume analysis, yet high sensitivity is assured by a long optical path length. The limit of detection is in the low  $\mu g/L$  range.

#### Results you can rely on

Smart automatic features for calibration, validation, priming and cleaning are embedded in the controller software and contribute to analytical performance, maximised uptime and negligible operator invervention. Precision micropumps dose all reagents. Sample lines and analysis vessel are cleaned with demineralised water to eliminate cross contamination between samples. Electronic and wet-chemical part of the analyser are strictly separated. A transparent door allows for instant visual inspection of the wet part.

#### Flexibility that meets your needs

EZ Series Ammonium Analysers come in an attractive, ergonomic mainframe with a compact footprint. All hardware is controlled by the integrated industrial panel PC. The modular build allows for the analyser to match your application and operational needs.

- The standard measuring range can be narrowed by a different calibration range or extended via internal dilution options.

- Analogue and digital output options
- Multiple stream analysis for up to 8 sample streams

There are many additional options available. Please contact Hach for more details.

## Specifications

Alarm:	1x malfunctioning, 4x user-configurable, max. 24 VDC/0.5 A, potential free contacts
Ambient temperature:	10 - 30 °C $\pm$ 4 °C deviation at 5 - 95% relative humidity (non-condensing)
Analogue outputs:	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)
Automatic cleaning:	Yes
Calibration:	Automatic, 2-point; frequency freely programmable
Certifications:	CE compliant / ETL certified
Cycle Time:	25 min (dilution + 5 min)
Demineralised water:	For rinsing / dilution

Detection limit:	$\leq 5 \mu$ g/L
Digital outputs:	Optional: Modbus (TCP/IP, RS485)
Dimensions (H x W x D):	690 mm x 465 mm x 330 mm
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 $mm^2$
Flow rate:	100 - 300 mL/min
Instrument air:	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Interferences:	Amino acids, hydrazine and urea. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Material:	Hinged part: Thermoform ABS, door: PMMA
	Wall section: Galvanised steel, powder coated
Measurement method:	Colorimetric measurement at 630 nm based on standard method APHA 3500-NH3 (Berthelot)
Measuring range:	0.025 - 1 mg/L NH <sub>4</sub>
	Optional:
	0.005 - 0.1 mg/L NH <sub>4</sub>
	0.01 - 0.25 mg/L NH <sub>4</sub>
	0.01 - 0.5 mg/L NH <sub>4</sub>
	0.2 - 4 mg/L $NH_4$ (with internal dilution)
	0.4 - 8 mg/L $NH_4$ (with internal dilution)
	2.5 - 100 mg/L $NH_4$ (with internal dilution)
Model:	EZ1102
Number of sample streams:	1, 2, 4, or 8
Parameter:	Ammonium
Power:	100 - 240 VAC, 50/60 Hz
	Max. power consumption: 120 VA
Power supply:	100 - 240 VAC, 50/60 Hz
Precision:	Better than 2% full scale range for standard test solutions
Protection class:	Protection class: Analyser cabinet: IP44 / Panel PC: IP65
Reagent Requirements:	Keep between 10 - 30 °C
Sample pressure:	By external overflow vessel
Sample quality:	Maximum particle size 100 $\mu$ m, < 0.1 g/L; Turbidity < 50 NTU
Sample temperature:	10 - 30 °C
Validation:	Automatic; frequency freely programmable
Warranty:	24 months
Weight:	25 kg
What's included?:	EZ1102 Ammonium (Berthelot Method) Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets and 2 x empty 2.5L Glass Reagent Containers with Fittings (for Reagent A & Reagent B Solution)

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