



# Amtax sc Ammonium Analyzer, Outdoor, 0.02-5.0mg/L NH<sub>4</sub>-N, One Channel Continuous Sample, 115-230 VAC

**Product #:** ZAR Price: 9009100

Contact Hach



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If necessary, we will change your selected shipping method to accomodate these items.

## Transparent, high quality measurement technology for reliable values with short response time

Hach's Amtax sc Analyzer offers a wide measurement range for a variety of wastewater applications. It has a low detection limit of 0.02 mg/ L and fast response time that includes sample preparation. It is environmentally controlled for rugged, outdoor installations and designed specifically for easy installation at the measurement point. The probe is equipped with a self-cleaning membrane, and thus requires little maintenance. The Analyzer features easy access to reagents and wear parts.

Prognosys is a predictive diagnostic system that allows you to be proactive in your maintenance, by alerting you to upcoming instrument issues. Know with confidence whether changes in your measurements are due to changes in your instrument or your water.

The Amtax sc must be connected to an SC controller to form a complete loop.

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

#### Wide Measurement Range

Amtax sc Ammonium Analyzers are available in four measuring ranges. With detection limits as low as 0.02 mg/L and ranges up to 1000 mg/L, the Amtax sc can be used anywhere in the wastewater treatment process, from the influent or start of the nitrification process with high NH<sub>4</sub>-N levels to the effluent with only low ammonium levels. In the lowest range it can also be used for drinking water applications.

#### Fast Response Time for Control of Nutrient Removal Process

Nutrient removal is a critical and sensitive process in wastewater treatment. Quick response is vital for optimal operation. The fast response time of only 5 minutesand selection of the measurement interval, make the Amtax sc Ammonium Analyzer the fastest responding ammonia analyzer on the market.

#### **Easy Installation**

The Amtax sc Analyzer is designed to be installed at the measuring location, including outdoor locations. The housing is weatherproof and lockable so that the analyzer can be installed right at the basin, even in the toughest climates.

The Amtax sc easily mounts to a wall, rail- and stand-mounting options are available. Due to its SC technology the analyzer is ready for use in the network of the SC controller ("plug-and-play").

#### Low Maintenance and Simple Operation

The analyzer calibrates and cleans itself automatically and is equipped with comprehensive self-diagnostic routines. With at least a 3-month supply of reagents (for 5 min interval), the Amtax sc analyzer offers the most economical reagent consumption. Reagents and wear parts are easily accessible.

#### **Optional with Sample Preparation or Second Channel**

The Amtax sc analyzer works with a low-maintenance filtration system (e.g. Filtrax) that removes particles larger than 0.15 µm. The filtrate is sent to the analyzer while air bubbles constantly clean the filtration membrane.

The analyzer is also available as two channel version for measurement at two different sampling points.

# Specifications

Accuracy:	Using standard solutions: 3% + 0.02 mg/L ; > 1.0 mg/L: 5% + 0.02 mg/L
Cable Length:	2 m fixed power cable at analyzer
Dimensions (H x W x D):	720 mm x 540 mm x 390 mm
Enclosure rating:	IP55
Filtersystem included:	No, use e.g. Filtrax
Flow:	1 - 20 L/h Sample (free of suspended solids)
Fuse Protection:	Via SC1000 controller or power box. Maximum of 2 analysers per SC1000 or power box
Indoor/Outdoor:	Outdoor
Lower Limit of Detection (LOD):	$0.02 \text{ mg/L } \text{NH}_{4}\text{-N}$
Lowest Detection Limit :	0.02 mg/L NH <sub>4</sub> -N
Material:	ASA/PC UV-resistant
Measurement method:	GSE (Gas Sensitive Electrode) with screw-on membrane cap
Measuring Interval:	5 - 120 min, adjustable per 5 min.
Measuring Principle:	$\rm NH_4$ is being converted to $\rm NH_3$ gas, which is being measured at the GSE.
Measuring range:	0.02 - 5.0 mg/L NH -N
Number of Channels:	1
Operating Humidity:	95% relative humidity, non-condensing.
Operating temperature range:	-20 - 45 °C
Outputs:	Current output, relays and bus communication via SC controller
Parameter:	Ammonium
Permissible Chloride range:	Max. Cl <sup>-</sup> concentration: 1000 mg/L
pH Range:	5 - 9 pH
Power requirements (Hz):	50 Hz
Power requirements (Voltage):	115 - 230 VAC, powered by Power Box or SC Controller
Pressure Range:	-30 - 50 mbar With continuous sample preparation; at overflow vessel
Reproducibility:	3% + 0.02 mg/L
Response Time:	0.02 - 2.0 mg/L: 15 min;
	2.0 - 5.0 mg/L: 5 min
Sample Level:	Sample level in basin and filtration system must be below analyzer.
Sample Quality:	Ultra filtrated or comparable
Sample Temperature:	4 - 40 °C (39 - 104 °F)
Sampling Option:	One channel continuous sample from filtration unit, e.g. Filtrax
Special Features:	Lockable housing; automatic cleaning and calibration; extensive self-diagnostics
Storage conditions:	4 - 55 °C; 95% relative humidity, non-condensing
Warranty:	12 months
Weight:	Without sample preparation system and without chemicals: 31 kg
What's included?:	0.02-5 mg/L $NH_4$ -N, 115 VAC Amtax sc Ammonium Analyzer, 3 month supply of all necessary consumables at 5 minute cycle time, user manuals.

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### **Required Accessories**

- SC1000 Display Module, Multi-Parameter Universal Controller (Item LXV402.99.00002)
- SC1000 Probe Module, 6 Sensor Connectors, Prognosys, Modbus 485, 100-240 VAC with Conduits (Item LXV400.99.1H082)
- SC1000 Probe Module, 8 Sensor Connectors, Prognosys, 100-240 VAC with Conduits (Item LXV400.99.1G092)
- SC1500 Controller, 6 Sensor Connectors, 8Ma Out, 110V/Cond Ext MOD (Item LXV446.99.103N1)
- SC1500 Controller, 6 Sensor Connectors, 8Ma Out, 110V/Cond 4 Relay/C Ext MOD (Item LXV446.99.1R3S1)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 100-240 VAC, US plug (Item LXV525.99E11551)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 100-240 VAC, without power cord (Item LXV525.99A11551)
- SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 100-240 VAC, without power cord (Item LXV525.99A11501)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 24 VDC, without plug (Item LXV525.99Z11551)