



# Amtax indoor sc Ammonium analyser, indoor, 0.02 - 5.0 mg/L NH<sub>4</sub>-N, 1-channel

Product #: LXV421.99.43011 Hazardous

AED Price: Contact Hach





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

High precision process-instrument for the determination of ammonium in water, wastewater and activated sludge. Indoor enclosure. 1-channel continuous. 115-230 VAC, 50/60 Hz power supply.

Can take one continous sample stream coming from a sample preparation, e.g. Filtrax.

The ammonium concentration in the sample is then determined by a gas sensitive electrode (removable membrane cap). Measuring range  $0.02-5.0 \text{ mg/L NH}_4-\text{N}$ .

Evaluation and operation with SC Controller.

The analyser is equipped with an insulated enclosure for indoor installation.

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.

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.

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

#### Wide measuring range

Amtax sc Ammonium Analysers 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 minutes and selection of the measurement interval, make the Amtax sc one of the fastest responding ammonium analysers on the market.

### **Easy installation**

The Amtax sc Analyser is designed to be installed at the measuring location, including outdoor locations. The housing is weatherproof and lockable so that the analyser 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 anlyser is ready for use in the network of the SC controller ("plug-and-play").

### Low maintenance and simple operation

The analyser 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 analyser offers the most economical reagent consumption. Reagents and wear parts are easily accessible.

## Optional with sample preparation or second channel

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

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

## **Specifications**

Accuracy:  $\leq 1 \text{ mg/L: } 3 \% + 0.02 \text{ mg/L: } 5 \% + 0.02 \text{ mg/L}$ 

Cable length: 2 m fixed data cable at analyser

Detection limit:  $0.02 \text{ mg/L NH}_4\text{-N}$ 

Dimensions (H x W x D): 720 mm x 540 mm x 370 mm

Enclosure waterproof rating: IP54

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: Indoor

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: NH<sub>4</sub> is being converted to NH<sub>3</sub> gas, which is being measured at the GSE.

Measuring range:  $0.02 - 5.0 \text{ mg/L NH}_{4}\text{-N}$ 

Number of channels: 1

Operating humidity: 95% relative humidity, non-condensing

Operating temperature range: 5 - 40 °C

Output: 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): 50/60 Hz

Power requirements (Voltage): 115 - 230 V AC, powered by Power Box or SC Controller

Pressure range: -30 - 50 mbar with continuous sample preparation; at overflow vessel

Reproducibility: 2% + 0.02 mg/L

Response time: 0.02 - 2.0 mg/L: 15 min;

2.0 - 5.0 mg/L: 5 min

Sample level: Level of liquid in basin with filtration probe must be below analyser

Sample quality: Ultra filtrated or comparable.

Sample temperature: 4 - 40 °C

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 less than 95% relative humidity

Warranty: 24 months

Weight: Without sample preparation system and without chemicals: 29 kg

0.02-5 mg/L NH<sub>4</sub>-N, 230 VAC Amtax sc Ammonium Analyser, 3 month supply of all necessary consumables at 5 minute cycle time, user manuals.

What's included?:

## What's included?

0.02-5 mg/L NH<sub>4</sub>-N, 230 VAC Amtax sc Ammonium Analyser, 3 month supply of all necessary consumables at 5 minute cycle time, user manuals.

## **Required Accessories**

- SC1000 Probe Module, 4 Sensor Connectors, 4 mA Output, 4 Relays, 100-240 VAC, with EU plug (Item LXV400.99.2R121)
- SC1000 Display Module (Item LXV402.99.00001)
- 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)