## AMTAX<sup>™</sup> sc Ammonia Analyzer



Distribuidores Autorizados Buenos Aires, Argentina Tel.: (54-11) 5352-2500 E mail: info@dastecsrl.com.ar Web: www.dastecsrl.com.ar



## Features and Benefits

#### Wide Measurement Range

Hach AMTAX sc Ammonia Analyzers are available in three measurement ranges. Each range only needs a different set of reagents and selection of the desired range in the instrument menu.

Low Range—0.05 to 20 mg/L  $NH_4$ -N Mid Range—1 to 100 mg/L  $NH_4$ -N High Range—10 to 1000 mg/L  $NH_4$ -N

# Wide Detection Limit for a Variety of Wastewater Applications

With detection limits as low as 0.05 mg/L and as high as 1000 mg/L, the AMTAX sc Ammonia Analyzer can be used anywhere in the wastewater treatment process, from the influent or start of the nitrification process where ammonia levels are at their highest to the effluent where ammonia levels are at their lowest

# 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, including sample preparation and selection of the measurement interval, make the AMTAX sc Ammonia Analyzer the fastest responding ammonia analyzer on the market.

## Easy Installation at the Measurement Point

Hach's AMTAX sc Ammonia Analyzer is designed to be installed at the measurement point—including outdoor installations. The housing is weatherproof and lockable so that the AMTAX sc analyzer can be installed right at the basin, even in the toughest climates.

- Easily mounts to a wall. Rail- and stand-mounting options are available
- The unit comes complete and assembled—no separate housing is required

The Hach AMTAX sc Ammonia Analyzer measures NH<sub>4</sub>-N concentrations as low as 0.05 mg/L and as high as 1000 mg/L. With a fast, 5-minute response time, it enhances control of the nutrient removal process. This is no "black box" system—you get transparent, high-quality measurements for reliable values.

## Low Maintenance

Several features make the AMTAX sc Ammonia Analyzer easy to use and maintain.

- The Filterprobe sc is equipped with a self-cleaning filter
- With at least a 3-month supply of reagents, the AMTAX sc Analyzer offers the most economical consumption
- Automatic cleaning and calibration once a day with two standard solutions
- Comprehensive self diagnostics
- Easy access to reagents and wear parts

## Full Featured "Plug and Play" Digital Controller

There's no complicated wiring or set up procedures with the Hach sc1000<sup>™</sup> Multi-parameter Universal Controller. Just plug in any Hach digital sensor or analyzer and it's ready to use—it's "plug and play." Please see Hach Lit. #2403 for more information.

#### **Optional Filterprobe sc Sample Preparation System**

The Hach AMTAX sc Ammonia Analyzer is available with a low-maintenance filtration probe that removes particles larger than 0.15  $\mu$ m. Filtrate is sent to the analyzer while air bubbles constantly clean the filtration membrane. When cleaning is required, a simple wipe with a cloth or sponge is all that is needed. The AMTAX sc analyzer may also be used with existing filtration systems that deliver a continuous sample stream.

DW = drinking water WW = wastewater municipal PW = pure water / power IW = industrial water E = environmental C = collections FB = food and beverage



## Specifications\*

### AMTAX sc Ammonia Analyzer

#### Measurement Method

GSE (Gas Sensitive Electrode) with screw-on membrane cap

|  | Low Range       | Mid Range     | High Range      |
|--|-----------------|---------------|-----------------|
| Measurement Range (NH <sub>4</sub> -N) | 0.05 to 20 mg/L | 1 to 100 mg/L | 10 to 1000 mg/L |
| Lower Detection Limit                  | 0.05 mg/L       | 1 mg/L        | 10 mg/L         |
| Accuracy                               | 3% ±0.05 mg/L   | 3% ±1.0 mg/L  | 4.5% ±10 mg/L   |
| Reproducibility                        | 2% ±0.05 mg/L   | 2% ±1.0 mg/L  | 2% ±10 mg/L     |

#### Response time (T90)

Less than 5 minutes, including sample preparation

*Measurement Interval* 5 to 120 minutes, adjustable

## Sample Conditions

Temperature: 4 to 40°C (39 to 104°F) pH: 5 to 9

#### **Operating Conditions**

Temperature: -20 to 45°C (-4 to 113°F) Humidity: 95% relative humidity, noncondensing

## Storage Conditions (excluding reagents)

Temperature: -20 to 50°C (-4 to 122°F) Humidity: 95% relative humidity, noncondensing

#### Power Supply

230 Vac/50Hz or optional 115 Vac/ 50-60Hz; connected to sc1000 Multi-parameter Universal Controller (see Hach Lit. #2403)

#### Data Transmission

With data cable on sc1000 Multi-parameter Universal Controller (see Hach Lit. #2403)

#### Outputs

Relay, current outputs, and bus interface via sc1000 Multi-parameter Universal Controller (see Hach Lit. No. 2403)

#### **Special Features**

ASA UV-resistant, lockable housing, rated to IP55 Automatic cleaning and calibration Extensive self-diagnostics Optional 2-channel version for continuous sample preparation

#### Sample Preparation

Filterprobe sc (see specifications below) or continuous sample preparation (approximately 500 to 1000 mL/min) with FILTRAX, ultrafiltration, etc.

#### **Dimensions**

540 x 720 x 390 mm (21.3 x 28.3 x 15.4 in.)

#### Cable Length

2 m (6.6 ft.) from housing

#### Weight

35 kg (77 lbs.) including reagents

#### Filterprobe sc

#### Operation

In-situ membrane filtration

Filter modules are exchangeable

Continuous self-cleaning with air bubbles

Particles larger than 0.15  $\mu m$  are separated from sample stream

#### **Power Supply**

Via analysis instrument 100 VA (brief peak power consumption: 1000 VA), with 5 or 10 m heated filter probe hose. Electrical fuse protection. *Immersion Depth* 3 m (9.8 ft.), maximum

## Sample Flow Rate 3 m/s, maximum

#### *Filtrate Flow Rate* 5 mL/minute, minimum, 4 out of 5 minutes

Maintenance

0.5 hours per month, typical

Dimensions

315 x 250 x 120 mm (12.4 x 9.8 x 4.7 in.)

Supply Hose Length 5 or 10 m (16.4 or 32.8 ft.)

Weight

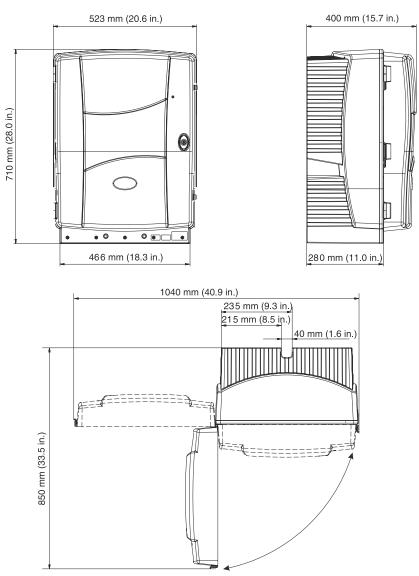
Filter housing: 9.5 kg (30 lbs.) Hose: 8 kg (18 lbs.)

\*Specifications subject to change without notice.

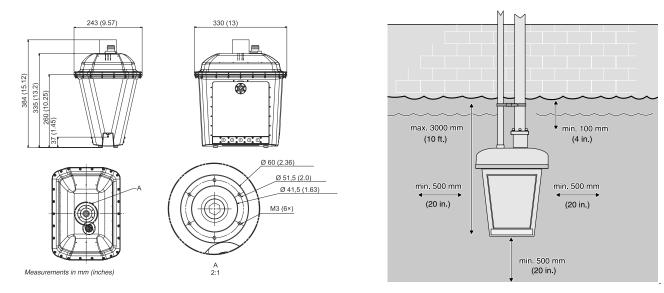
## Engineering Specifications

- 1. The analyzer shall be equipped with a gas sensitive electrode (GSE) for the purpose of ammonia measurement.
- 2. The analyzer shall be housed in an ASA UV-resistant, IP55-rated, lockable housing to be installed at the measurement point.
- 3. The analyzer measurement range shall be from 0.5 to 1000 mg/L  $NH_4$ -N in three intervals.
- The lower detection limit of measurements shall be 0.05 mg/L NH<sub>4</sub>-N.
- 5. The response time, including sample preparation, shall be 5 minutes.
- 6. The analyzer's operating temperature range shall be from -20 to 45°C.
- 7. The power requirements shall be 115 or 230 Vac, 50/60 Hz, via the controller.
- 8. The analyzer shall calibrate and clean automatically.
- 9. The analyzer shall be equipped with self-diagnostics.
- 10. There shall be available an optional filtration system that conditions the sample for the analyzer.
- 11. The analyzer shall be Hach Company AMTAX sc Ammonia Analyzer.

DASTEC S.R.L. Hipólito Yrigoyen 850 Piso 3 Of. 335 C1086AAN Buenos Aires - Argentina TE: (54-11) 4343-6200 // 4331-2288 Fax: (54-11) 4334-3120 Email: dastecsrl@dastecsrl.com.ar Web: www.dastecsrl.com.ar The AMTAX sc Ammonia Analyzer is designed for wall mounting, outdoors or indoors. Rail- and stand-mounting options are available. The enclosure is rated to IP55, is weatherproof, and is lockable.



The Filterprobe sc should be installed at least 20 inches from the bottom and walls of the tank and must have at least four inches, but no more than 10 feet, of water above it.



## **Ordering Information**

#### AMTAX sc Ammonia Analyzer with Filterprobe sc 61572-00 AMTAX sc Ammonia Analyzer. 0.05 to 20 mg/L, 115 Vac; includes filtration probe with 5 m heated hose 61573-00 AMTAX sc Ammonia Analyzer, 0.05 to 20 mg/L, 115 Vac; includes filtration probe with 10 m heated hose 61578-00 AMTAX sc Ammonia Analyzer, 1 to 100 mg/L, 115 Vac; includes filtration probe with 5 m heated hose 61579-00 AMTAX sc Ammonia Analyzer, 1 to 100 mg/L, 115 Vac; includes filtration probe with 10 m heated hose 61584-00 AMTAX sc Ammonia Analyzer, 10 to 1000 mg/L, 115 Vac; includes filtration probe with 5 m heated hose 61585-00 AMTAX sc Ammonia Analyzer, 10 to 1000 mg/L, 115 Vac; includes filtration probe with 10 m heated hose AMTAX sc Ammonia Analyzer Only 61574-00 AMTAX sc Ammonia Analyzer, 0.05 to 20 mg/L, one channel with continuous sample, 115 Vac 61580-00 AMTAX sc Ammonia Analyzer,

- 1 to 100 mg/L, one channel with continuous sample, 115 Vac
- 61586-00 AMTAX sc Ammonia Analyzer, 10 to 1000 mg/L, one channel with continuous sample, 115 Vac

For two-channel version of the AMTAX sc Ammonia Analyzer, please contact your Hach representative or call 1-800-227-4224.

### Sample Filtration

LXV429.99.01000 Filterprobe sc, 5 m heated hose, 230 Vac/50 Hz

#### LXV429.99.02000

Filterprobe sc, 10 m heated hose, 230 Vac/50 Hz

#### LXV429.99.01100

Filterprobe sc, 5 m heated hose, 115 Vac/50 to 60 Hz

#### LXV429.99.02100

Filterprobe sc, 10 m heated hose, 115 Vac/50 to 60 Hz

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| 57389-00 | Filtrax system, 2 m unheated hose,<br>115 Vac |
|----------|---|
| 57390-00 | Filtrax system, 10 m heated hose,<br>115 Vac  |
| 57391-00 | Filtrax system, 20 m heated hose,<br>115 Vac  |
| 57389-01 | Filtrax system, 2 m unheated hose, 230 Vac    |
| 57390-01 | Filtrax system, 10 m heated hose,<br>230 Vac  |
| 57391-01 | Filtrax system, 20 m heated hose,<br>230 Vac  |

#### Controller

To order the sc1000 Multi-Parameter Universal Controller, please contact your Hach representative or call 1-800-227-4224.

#### **Mounting Accessories**

| LZY285  | Rail Mounting Kit for AMTAX sc<br>analyzer with sc1000 controller  |  |
|---|--|--|
| LZY316  | Rail Mounting Kit for AMTAX sc analyzer without sc1000 controller  |  |
| LZY286  | Stand Mounting Kit for AMTAX sc analyzer with sc1000 controller    |  |
| LZY287  | Stand Mounting Kit for AMTAX sc analyzer without sc1000 controller |  |
| LZX414.00.50000<br>Rim Mounting Kit for Filterprobe sc  |  |  |
| LZX414.00.60000<br>Rail Mounting Kit for Filterprobe sc |  |  |

#### Reagents

| 28941-54          | 1 mg/L NH <sub>4</sub> -N Standard Solution,<br>2000 mL   |  |
|-------------------|---|--|
| 28943-54          | 10 mg/L NH <sub>4</sub> -N Standard Solution, 2000 mL     |  |
| 28258-54          | 50 mg/L NH <sub>4</sub> -N Standard Solution, 2000 mL     |  |
| 28259-54          | 500 mg/L NH <sub>4</sub> -N Standard<br>Solution, 2000 mL |  |
| 28944-52          | AMTAX sc Reagent, 2500 mL                                 |  |
| 61825-00          | AMTAX sc Electrolyte, 11 mL                               |  |
| 28942-46          | AMTAX sc Cleaning Solution, 250 mL                        |  |
| Replacement Parts |   |  |
| LZY069            | NH <sub>4</sub> -N Electrode for AMTAX sc                 |  |

| LZY069 | NH <sub>4</sub> -N Electrode for AMIAX sc   |
|--------|---|
|        | analyzer                                    |
| LZY181 | Pump Head for AMTAX sc analyzer<br>air pump |
| LZY140 | Filter Module for Filterprobe sc            |

At Hach, it's about learning from our customers and providing the right answers. It's more than ensuring the quality of water—it's about ensuring the quality of life. When it comes to the things that touch our lives...

Keep it pure.

Make it simple.

## Be right.

For current price information, technical support, and ordering assistance, contact the Hach office or distributor serving your area.

In the United States, contact:

HACH COMPANY World Headquarters P.O. Box 389 Loveland, Colorado 80539-0389 U.S.A. Telephone: 800-227-4224 Fax: 970-669-2932 E-mail: orders@hach.com **www.hach.com** 

U.S. exporters and customers in Canada, Latin America, sub-Saharan Africa, Asia, and Australia/New Zealand, contact:

HACH COMPANY World Headquarters P.O. Box 389 Loveland, Colorado 80539-0389 U.S.A. Telephone: 970-669-3050 Fax: 970-461-3939 E-mail: intl@hach.com **www.hach.com** 

In Europe, the Middle East, and Mediterranean Africa, contact:

HACH LANGE GmbH Willstätterstraße 11 D-40549 Düsseldorf GERMANY Tel: +49 (0) 211 5288-0 Fax: +49 (0) 211 5288-143 E-mail: info@hach-lange.de **www.hach-lange.com** 

