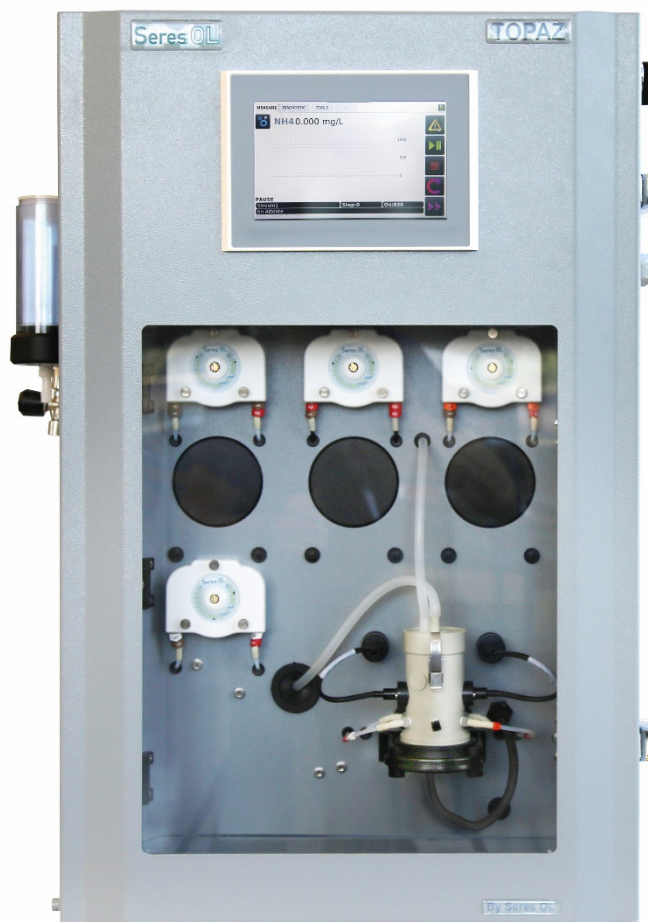


Complete monitoring system for the automatic, continuous measurement of ammonium NH_4^+ in potable water, surface water, wastewater and effluents.

Analyzer Topaz Ammonium

- For the continuous, colorimetric online determination of ammonium per EN-ISO 7150/1:1984, DIN 38406-E5-1 and T90-015.
- Available in separate measuring ranges:
 - Topaz Ammonium LR:** 0 to 500 ppb
 - Topaz Ammonium HR:** 0 to 2 ppm
 - Topaz Ammonium HRx25:** 0 to 50 ppm
- Complete system including measurement and control electronics, measuring unit, flow indicator, reaction chamber and reagent dosing system.
- Robust, high quality analyzer cabinet painted stainless steel, 316L.
- Automatic, electrical zero measurement prior to each measurement cycle.
- Automatic cell cleaning.
- 4 easily accessible peristaltic pump modules (5 for HRx25) for accurate, automatic dosing of chemical reagents.
- 2 analog and 7 digital outputs for alarms for process values and diagnostic alarms for each sample stream.
- RS485 Modbus/JBUS RTU interface.
- Large back-lit touchscreen color LCD display for the reading of all measured values and status information simultaneously.
- Easy menu-guided operation in English or French.



По вопросам продаж и поддержки обращайтесь:

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 Томск (3822)98-41-53
 Тула (4872)74-02-29
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Киргизия (996)312-96-26-47

Казахстан (772)734-952-31

Таджикистан (992)427-82-92-69

Ammonium Measurement

Indophenol method; colorimetric determination of ammonium ions after chemical reaction in an alkaline environment.
Reaction time LR/HR 15 min.
Reaction time HRx25 17 min.

Sensors/Measurement Equipment
Detection wavelength 660 nm
Temperature controlled measuring chamber

Analyzer	Measuring range
Topaz Ammonium LR	0-500 ppb
Limit of Detection	15 ppb
Repeatability	2% FS
Accuracy	3% FS
Topaz Ammonium HR	0-2 ppm
Limit of Detection	0.1 ppm
Repeatability	± 2 % or ± 0.06 ppm (whichever is greater)
Accuracy	± 2 % or ± 0.06 ppm (whichever is greater)
Topaz Ammonium HRx25	0-50 ppm
Limit of Detection	< 0.5 ppm
Repeatability	< ± 3 % FS
Accuracy	< ± 3 % FS

Automatic baseline adjustment.
Semi-automatic calibration function.
Sample flow surveillance.

Specifications and Functionality

Pump type peristaltic
Pump quantity LR/HR 4
Pump quantity HRx25 5

Power supply
Voltage: 110 - 240 VAC
Frequency: 50 /60 Hz
Power consumption: Typical 150 VA, 300 max.

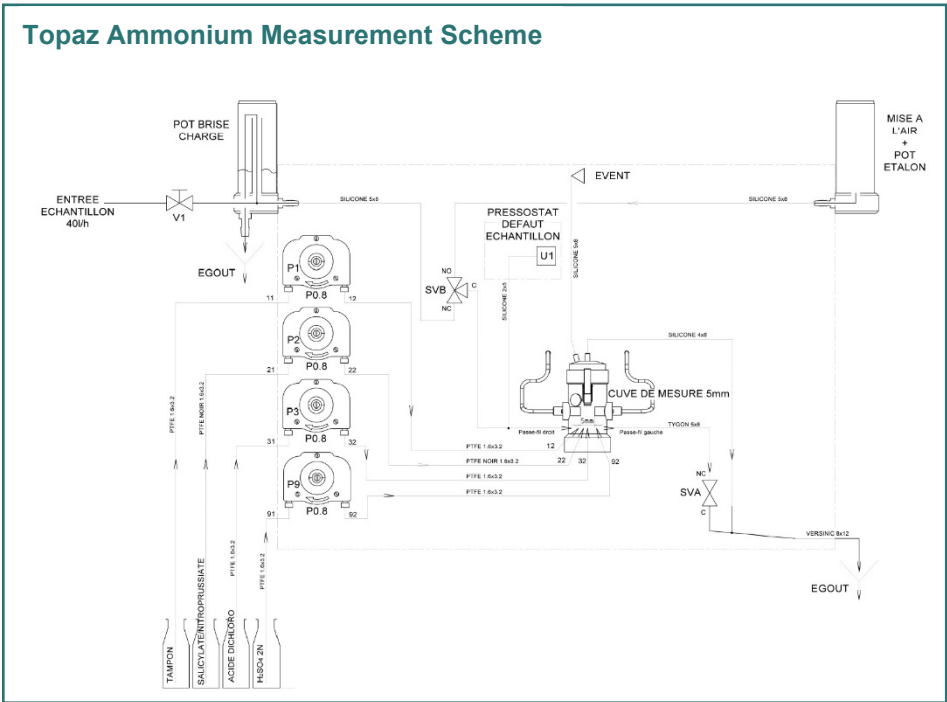
Operation
Display: Color LCD, 7", touch-screen

Display of process value, alarm status and time during operation.

Smart and intuitive interface based on separate menu sections: "Measurement", "Diagnostic" and "Tools".

User menus in English and French.

Password protection and storage of data records. Storage and graphical display of measurement history.



Alarm Relays
1 summary alarm for "analyzer failure"

Maximum load: 1A / 24 V

Relay Outputs
2 potential-free contacts for each channel programmable as limit switches for measuring values (high/low thresholds)
1 sample flow alarm for each channel
1 output for indication of the active sample stream for each channel.
1 output for maintenance indication.

Rated load: 1A / 24 V

Signal outputs
2 programmable signal outputs for measured values (freely scalable, linear).

Current loop: 4 - 20 mA

Communication interface
RS485 interface (galvanically separated) with Modbus/JBUS RTU protocol included in standard.
Ethernet interface (TCP/IP) optional.

Analyzer Data

Sample conditions
Flow rate for sample: min. 30 l/h
opt. 40 l/h
Flow rate for sample dilution: min 30 l/h
opt. 40 l/h
Temperature: 5 to 40 °C
Inlet pressure_{Abs.} (25 °C): 0.1 up to 2.0 bar
Outlet pressure: pressure-free
Particle size: < 20 µm

Ambient Conditions
Temperature: 5 to 40 °C
Humidity: 10 to 80% rel.

Sample connections
Sample inlet: 1/4" BSP F
Sample outlet: soft tubing D INT 9
Sample outlet waste: soft tubing D INT 12
Sample outlet multi-ch.: soft tubing D INT 19

Wall cabinet
Dimensions: 780 x 570 x 370 mm
Material: Stainless Steel 316L
Total weight: 35 kg
Protection degree: IP 55

Reagent specifications

Type	Code
pH Buffer Solution (pH12)	RXX113
Salicylate / Nitroprussiate	RXX115
Dichloroisocyanuric acid	RXX111
Sulfuric acid 2N	RXX159
Reagent Consumption	1.1 l/month
Deionized Water (Dilution – Ammonium HRx25)	
Consumption	max. 130 l/day