xylem

Ammonium up to 150 mg/L

Wet-chemical analyzer for wastewater and river monitoring

WTW
xylem

Focus on your benefits

Analyzer to monitor ammonium concentrations in wastewater treatment plants and rivers – up to 150 mg/L, with automatic switch of the measuring range and event-driven measurement.

- Reliable results even at low concentrations
- Event-driven measurement by external signal
- Optional verification with additional standard solution
- Corrosion resistant motor drive unit

AutoRange
Stay up-to-date – the automatic measuring range switch always provides a measured value.

Trigger measurement
Reduce consumption – with event-driven sampling you measure when it really matters.

Controlable filtration pump
Reduce your costs – adapt the sampling to your measuring interval and save on measuring technology and your wallet.

IQ SENSOR NET

The Alyza IQ NH$_4$ HR is fully integrated into the IQ SENSOR NET as a "sensor". The analyzer can be operated in the system 2020 and the System 282/284. Connected to the IQ SENSOR NET, the Alyza IQ NH$_4$ provides 10 W.

Learn more about IQ SENSOR NET on our website

Learn more about Alyza IQ NH$_4$ HR on the product detail page

Ammonium measurement

Blue Method – Indophenol method according to DIN 38 406

As the name suggests, the Indophenol method results in a blue coloration of the sample. The color is generated by the reaction of ammonium ions from the sample with hypochlorite ions and carbolic acid or a carbolic acid derivative under alkaline conditions (pH approx. 12.6). For acceleration of the reaction, a catalyst is used. The reaction can be sped up further by increasing the temperature of the reaction solution. The colored sample then is analyzed photometrically in the red spectral range. The higher the ammonium concentration, the more intense the blue coloration.

Fields of application

Wastewater treatment plant effluent monitoring

- High measuring accuracies even at low concentrations
- Easy handling due to optimized user interface
- Increased employee protection by safe exchange of reagents

River monitoring

- Long lifetime of chemicals due to minimum consumption
- Minimal maintenance effort reduces work and travel times
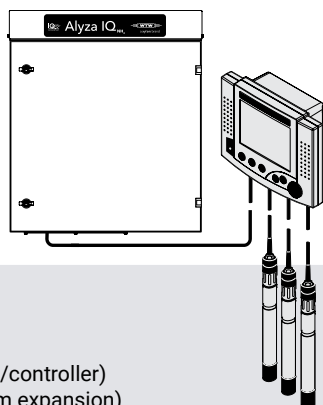- Full remote access via IQ WEB CONNECT, at any time

Configuration examples Alyza IQ NH$_4$ HR in IQ SENSOR NET

Example 1 – System 2020

Example configuration Order no.

MIQ/TC 2020 3G	470022
MIQ/JB	480008
SACIQ-7,0	480042
IQ Sensors	user selected
Alyza IQ NH$_4$ HR	825021

- **MIQ/TC 2020 3G** (terminal/controller)
- **MIQ/JB** (module for system expansion)
- **Alyza IQ NH$_4$ HR**
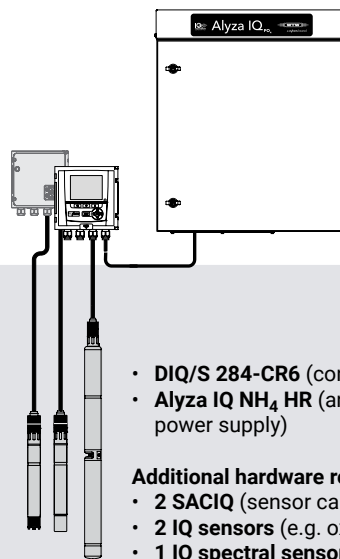 (Analyzer incl. SNCIQ cable and power supply)

Additional hardware required:
- **3 SACIQ** (sensor cables)
- **3 IQ sensors** (e.g. turbidity, pH, oxygen)

Example 2 – System 282/284

Example configuration Order no.

DIQ/S 284-CR6	472130
MIQ/JB	480008
SACIQ-7,0	480042
IQ Sensors	user selected
Alyza IQ NH$_4$ HR	825021

- **DIQ/S 284-CR6** (controller)
- **Alyza IQ NH$_4$ HR** (analyzer incl. SNCIQ cable and power supply)

Additional hardware required:
- **2 SACIQ** (sensor cables)
- **2 IQ sensors** (e.g. oxygen, pH)
- **1 IQ spectral sensor** (e.g. COD)

Neither example 1 nor example 2 needs a power supply module MIQ/PS, as the Alyza IQ provides 10 W to the systems.

Technical Data

Model	Alyza IQ NH$_4$ HR
Measurement method	Berthelot method (Indophenol method)
Cleaning	Automatic cleaning with cleaning solutions
Calibration	Automatic 2-point calibration
AutoCheck	Verification at 50 % of measuring range
AutoRange	Automatic switch of measruing range
Trigger	Start measurement by external signal
Measuring range 1	0.020 – 1.500 mg/L NH$_4$-N
Measuring range 2	0.020 – 5.000 mg/L NH$_4$-N
Measuring range 3	0.02 – 15.00 mg/L NH$_4$-N
Measuring range 4	0.05 – 50.00 mg/L NH$_4$-N
Measuring range 5	0.5 – 150.0 mg/L NH$_4$-N
Accuracy	up to ± 3 %, ± 0.06 mg/L NH$_4$-N
Resolution	up to 0.001 mg/L NH$_4$-N

TD
D2.28

Visit our website for regional sales offices and more contact info

Order information

Model	Description	Order no.
Alyza IQ NH$_4$-120	NH$_4$ analyzer, 1-channel, without filtration pump, with 5 measuring ranges, Indophenol method, connectable to the IQ SENSOR NET Systems 2020 and 282/284, provides 10 W to the IQ SENSOR NET; including 2 m SNCIQ cable, reagent sets need to be ordered separately	825020
Alyza IQ NH$_4$-121	like 825020, but with filtration pump	825021
MPV-2	MultiPortVentil 2 for Alyza IQ NH$_4$ HR for conducting the liquids	827001

Chemistry (selection)

Model	Description	Order no.
R-Set NH4/1-1	Reagents for Alyza IQ NH$_4$ HR	827540
C-NH4/1-1	Cleaning solution 1	827518
C-NH4/1-2	Cleaning solution 2	827519
S-NH4/1-XX	Standard solution for calibration and verification of 0.0 mg/l to 120 mg/l. *Please visit our website for more information.*	8275XX

xylem
Let's Solve Water