



**NEW**

for IQ SENSOR NET

# Alyza IQ: The Simple choice for NH<sub>4</sub> Analyzers



a xylem brand

# How much reagent does your analyzer use?

## Less Reagents

Minimized reagent consumption and waste

## Simple Service

Minimum maintenance with automatic cleaning and calibration

## Better Data

Reliable results from low to high measuring levels



## Simple Service

Built with Service in mind, all service items can be quickly and easily exchanged without calling a service technician or service contracts.

## Long Life Reagents

Easy and safe reagent replacement with no-drip reagent pouches.

## Clear Information

Clear measurement menu - even for 2 channel versions and monitoring of reagent life time.



The Alyza IQ NH<sub>4</sub> is fully integrated into the IQ SENSOR NET as a sensor. The new analyzer can be operated in the system 2020 and the System 282/284.

Learn more about IQ SENSOR NET on our website:  
[www.IQ-Sensor.Net](http://www.IQ-Sensor.Net)

Learn more about Alyza IQ NH<sub>4</sub> on our website:  
[www.WTW.com/Alyza-IQ](http://www.WTW.com/Alyza-IQ)



# Ammonium measurement

## 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



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### River monitoring

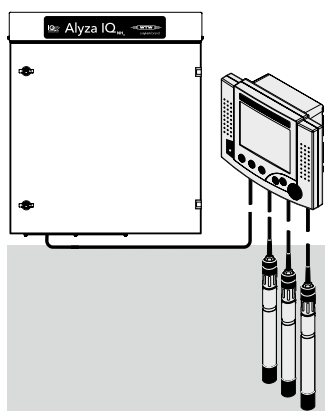
- Long lifetime of reagents due to minimum consumption
- Minimal maintenance effort reduces work and travel times
- Full remote access via IQ WEB CONNECT, at any time





# Configuration examples Alyza IQ NH<sub>4</sub> in IQ SENSOR NET

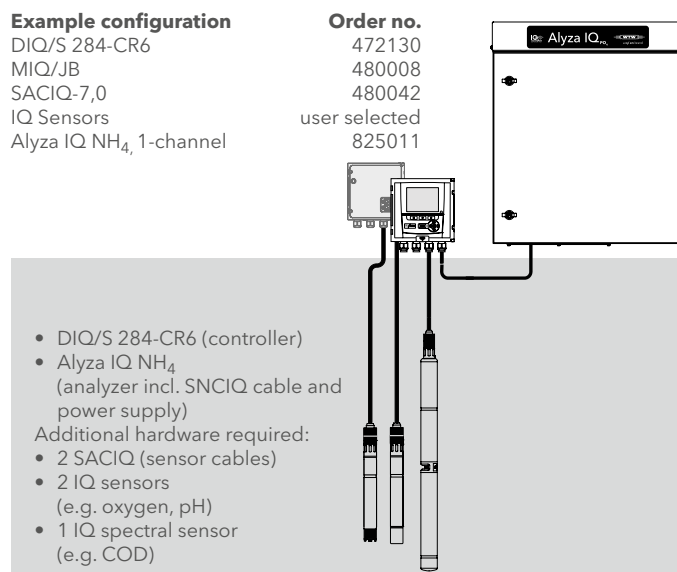
## Example 1 – System 2020



Example configuration	Order no.
MIQ/TC 2020 3G	470022
MIQ/JB	480008
SACIQ-7,0	480042
IQ Sensors	user selected
Alyza IQ NH <sub>4</sub> , 1-channel	825011

- MIQ/TC 2020 3G (terminal/controller)
  - MIQ/JB (module for system expansion)
  - Alyza IQ NH<sub>4</sub> (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 <sub>4</sub> , 1-channel	825011

- DIQ/S 284-CR6 (controller)
  - Alyza IQ NH<sub>4</sub> (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 10W to the systems.

## Technical data

Model	Alyza IQ NH <sub>4</sub>
Measurement method	Berthelot method (Indophenol method)
Measurement range	Two measuring ranges
Sample streams/channels	1- and 2-channel versions available
Cleaning	Automatic cleaning with cleaning solutions
Calibration	Automatic 1- and 2-point calibrations
Operational temperature	-4 ... 104 °F (-20 ... +40) °C

<b>MR1:</b>	0.02 ... 5.00 mg/l NH <sub>4</sub> -N
Displayed:	0.00 ... 5.00 mg/l NH <sub>4</sub> -N
Resolution:	0.01 mg/l NH <sub>4</sub> -N
Accuracy:	± 2 % ± 0.02 mg/l
<b>MR2:</b>	0.10 ... 20.00 mg/l NH <sub>4</sub> -N
Displayed:	0.00 ... 20.00 mg/l NH <sub>4</sub> -N
Resolution:	0.01 mg/l NH <sub>4</sub> -N
Accuracy:	± 3 % ± 0.10 mg/l



D2.24

## Order information

Model	Description	Order no.
<b>Alyza IQ NH<sub>4</sub>-111</b>	NH <sub>4</sub> analyzer, 1-channel, with 2 measuring ranges, Indophenol method, connectable to IQ SENSOR NET Systems 2020 and 282/284, provides 10 W to the IQ SENSOR NET; including 2m SNCIQ cable; reagent sets need to be ordered separately	825011
<b>Alyza IQ NH<sub>4</sub>-112</b>	NH <sub>4</sub> analyzer, 2-channel, with 2 measuring ranges, Indophenol method, connectable to IQ SENSOR NET Systems 2020 and 282/284, provides 10 W to the IQ SENSOR NET; including 2m SNCIQ cable; reagent sets need to be ordered separately	825012
<b>Reagent sets</b>		
<b>R-Set NH4/1-1</b>	Reagents for Alyza IQ NH <sub>4</sub> , when using MR1	827540
<b>R-Set NH4/1-2</b>	Reagents for Alyza IQ NH <sub>4</sub> , when using MR2	827541
<b>SC-Set NH4/1-1_0/1</b>	Calibration standards and cleaning solution for Alyza IQ NH <sub>4</sub> , when using MR1; Calibration standards with 0 mg/l and 1 mg/l	827545
<b>SC-Set NH4/1-1_0/4</b>	Calibration standards and cleaning solution for Alyza IQ NH <sub>4</sub> , when using MR1; Calibration standards with 0 mg/l and 4 mg/l	827546
<b>SC-Set NH4/1-2_0/16</b>	Calibration standards and cleaning solution for Alyza IQ NH <sub>4</sub> , when using MR2; Calibration standards with 0 mg/l and 16 mg/l	827547



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