YSI Alyza IQ Analyzers
THE SIMPLE CHOICE FOR ORTHOPHOSPHATE AND AMMONIUM ANALYZERS

ALYZA ANALYZER BROCHURE
W138-01
Meet Alyza IQ. It Just Works.

The innovative Alyza IQ analyzers are YSI’s reliable, low-maintenance solution for wastewater monitoring and control. Easy to maintain with reliable measurements, IQ analyzers just work... and work... and work.

**Low Reagent Use**
Uses 5µL (PO₄) or 15 µL (NH₄) reagent per sample, saving you time and money.

**Simple Service**
Reagent bag design makes replacing reagents easier and safer than ever.

**Reliable Measurements**
Real-time monitoring of reagent levels helps keep your analyzer in operation.

**Automatic Calibration**
Routine self calibration ensures accurate measurements.

**Quick, Easy Exchange Service**
Built with service in mind, all consumables can be quickly and easily exchanged without expensive service contracts or calling a service technician.

**Long-life Reagent**
Long-lasting no-drip replacement pouches are easier and safer to use.

[ysi.com/PO₄] [ysi.com/NH₄]
Applications

The Alyza PO4 and NH4 instruments are cabinet-style, wet chemistry analyzers with built-in sample delivery systems. Available in single- or dual-channel versions, Alyza features self-cleaning and calibration for reliable measurements. In addition, Alyza uses very little reagents, lowering your cost per measurement.

Orthophosphate measurement

Method | Molybdate-Vanadate method (Yellow method)

- Monitor and control chemical phosphorus removal, reducing dosing chemicals and sludge production
- Monitor biological phosphorus removal
- Effluent monitoring to ensure compliance
- Low measuring range for lowering effluent limits

Ammonium measurement

Method | Indophenol method

- Monitor and control ammonia-based aeration
- Effluent monitoring to ensure compliance

Networking

Integration

The Alyza IQ is fully integrated into the IQ SENSORNET as a sensor. The new analyzer connects to IQ SENSORNET 2020 or 282/284 controllers.
Innovation
Real-time monitoring of reagent levels. No more guessing the number of days left before reagents need changed.

Benefits of Alyza IQ

- Minimum maintenance with automatic cleaning
- High accuracy at low measuring ranges
- Extremely low reagent consumption - uses 5 µL (PO4) or 15 µL (NH4) per sample
- Connects to IQ SENSORNET controllers (provides 10W power)
- Easy installation - analyzers can be installed directly at the basin
- 1- or 2- channel versions; 2-channel allows for sampling from two locations
- Optimized user interface and self-diagnostics
- Serviceable - safe and easy replacement of reagents
- One- or two-point automatic calibration at user-defined intervals
- Ammonium or orthophosphate units available

Measurement Status of Alyza IQ showing last reading and time remaining until next measurement.

Innovation
Real-time monitoring of reagent levels. No more guessing the number of days left before reagents need changed.
Order information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alyza IQ NH₄ (Ammonium)</td>
<td>NH₄ analyzer, 1-channel, with 2 measuring ranges, Indophenol method, connects to 2020 and 282/284 controllers, provides 10 W to the IQ SENSOR NET; includes 2 meter SNCIQ cable. Controller, reagent sets, filter and mounting hardware need to be ordered separately.</td>
<td>825 011Y</td>
</tr>
<tr>
<td>Alyza IQ NH₄</td>
<td>NH₄ analyzer, 2-channel, with 2 measuring ranges, Indophenol method, connects to 2020 and 282/284 controllers, provides 10 W to the IQ SENSOR NET; includes 2 meter SNCIQ cable. Controller, reagent sets, filter and mounting hardware need to be ordered separately.</td>
<td>825 012Y</td>
</tr>
<tr>
<td>Reagent sets</td>
<td>Reagents for Alyza IQ NH₄ when using MR1</td>
<td>827 540Y</td>
</tr>
<tr>
<td>Reagent sets</td>
<td>Reagents for Alyza IQ NH₄ when using MR2</td>
<td>827 541Y</td>
</tr>
<tr>
<td>SC-Set NH₄/1-0/1</td>
<td>Calibration standards and cleaning solution for Alyza IQ NH₄ when using MR1; Calibration standards with 0 mg/l and 1 mg/l</td>
<td>827 545Y</td>
</tr>
<tr>
<td>SC-Set NH₄/1-0/4</td>
<td>Calibration standards and cleaning solution for Alyza IQ NH₄ when using MR1; Calibration standards with 0 mg/l and 4 mg/l</td>
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<tr>
<td>SC-Set NH₄/1-2_0/16</td>
<td>Calibration standards and cleaning solution for Alyza IQ NH₄ when using MR2; Calibration standards with 0 mg/l and 16 mg/l</td>
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</tbody>
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Alyza IQ for Orthophosphate measurement

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<tr>
<td>Alyza IQ PO₄</td>
<td>PO₄ analyzer, 1-channel, with MR1, yellow method, connects to 2020 and 282/284 controllers, provides 10 W to the IQ SENSOR NET; includes 2 meter SNCIQ cable. Controller, reagent sets, filter and accessories need to be ordered separately.</td>
<td>825 511Y</td>
</tr>
<tr>
<td>Alyza IQ PO₄</td>
<td>PO₄ analyzer, 2-channel, with MR1, yellow method, connects to 2020 and 282/284 controllers, provides 10 W to the IQ SENSOR NET; includes 2 meter SNCIQ cable. Controller, reagent sets, filter and accessories need to be ordered separately.</td>
<td>825 512Y</td>
</tr>
<tr>
<td>Alyza IQ PO₄</td>
<td>PO₄ analyzer, 1-channel, with MR2, yellow method, connects to 2020 and 282/284 controllers, provides 10 W to the IQ SENSOR NET; includes 2 meter SNCIQ cable. Controller, reagent sets, filter and mounting hardware need to be ordered separately.</td>
<td>825 521Y</td>
</tr>
<tr>
<td>Alyza IQ PO₄</td>
<td>PO₄ analyzer, 2-channel, with MR2, yellow method, connects to 2020 and 282/284 controllers, provides 10 W to the IQ SENSOR NET; includes 2 meter SNCIQ cable. Controller, reagent sets, filter and mounting hardware need to be ordered separately.</td>
<td>825 522Y</td>
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<tr>
<td>Reagent sets</td>
<td>Reagents for Alyza IQ PO₄-X1X with MR1</td>
<td>827 550Y</td>
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<tr>
<td>Reagent sets</td>
<td>Reagents for Alyza IQ PO₄-X2X with MR2</td>
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<tr>
<td>SC-Set PO₄/1-1_0/1</td>
<td>Calibration standards and cleaning solution for Alyza IQ PO₄-X1X with MR1; Calibration standards with 0 mg/l and 1 mg/l</td>
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<tr>
<td>SC-Set PO₄/1-1_0/10</td>
<td>Calibration standards and cleaning solution for Alyza IQ PO₄-X1X with MR1; Calibration standards with 0 mg/l and 10 mg/l</td>
<td>827 556Y</td>
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<tr>
<td>SC-Set PO₄/1-2_10/40</td>
<td>Calibration standards and cleaning solution for Alyza IQ PO₄-X2X with MR2; Calibration standards with 10 mg/l and 40 mg/l</td>
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Technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Alyza IQ NH₄ (Ammonium)</th>
<th>Alyza IQ PO₄ (Orthophosphate)</th>
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<tbody>
<tr>
<td>Measurement method</td>
<td>Berthelot method (Indophenol method)</td>
<td>Molybdate-Vanadate method (Yellow method)</td>
</tr>
<tr>
<td>Measurement range</td>
<td>Two measuring ranges</td>
<td>Measuring range is instrument dependent</td>
</tr>
<tr>
<td>NH₄</td>
<td>MR1: 0.02 to 5.00 mg/l NH₄-N Displayed: 0.00 to 4.00 mg/l NH₄-N Resolution: 0.01 mg/l NH₄-N Accuracy: ± 3 %, ± 0.02 mg/l</td>
<td>PO₄</td>
</tr>
<tr>
<td>NH₄</td>
<td>MR2: 0.10 to 20.00 mg/l NH₄-N Displayed: 0.00 to 20.00 mg/l NH₄-N Resolution: 0.05 mg/l NH₄-N Accuracy: ± 3 %, ± 0.10 mg/l</td>
<td>PO₄</td>
</tr>
</tbody>
</table>

Sample Time Intervals

- 1 channel: 10 minutes; 2 channel: 20 minutes
- 1 channel: 5 minutes; 2 channel: 10 minutes

Cleaning

Automatic cleaning with cleaning solutions

Calibration

Automatic 1- and 2-point calibrations

Operational temperature

-4 to 104 °F (-20 to +40 °C)

pH range

5 to 9

Warranty

2 years

Solids content

< 6 g/l before filtration
1) The tissue in plants that brings water upward from the roots;  
2) a leading global water technology company.

We’re a global team unified in a common purpose: creating advanced technology solutions to the world’s water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com