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

ysi.com/IQSN
Benefits of Alyza IQ

- Minimum maintenance with automatic cleaning
- High accuracy at low measuring ranges
- New MultiPort mixing valve dramatically reduces chemical consumption
- 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

New Filter Accessory
Rectangle filter and slide mount, with more robust membrane material and a stronger filter construction.

Precision
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.

Revolutionary
MultiPort Mixing Valve
# Technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Alyza IQ NH4 (Ammonium)</th>
<th>Alyza IQ PO4 (Orthophosphate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement method</td>
<td>Berthelot method (Indophenol method)</td>
<td>Moybdate-Vanadate method (Yellow method)</td>
</tr>
<tr>
<td>Measurement range</td>
<td>Two measuring ranges</td>
<td>Measuring range is instrument dependent</td>
</tr>
</tbody>
</table>

### NH4
- **MR1**: 0.02 to 5.00 mg/l NH₄⁻N
- **Displayed**: 0.00 to 5.00 mg/l NH₄⁻N
- **Resolution**: 0.01 mg/l NH₄⁻N
- **Accuracy**: ± 2 %, ± 0.02 mg/l

### PO4
- **MR1**: 0.02 to 15.00 mg/l PO₄⁻P
- **Displayed**: 0.00 to 15.00 mg/l PO₄⁻P
- **Resolution**: 0.01 mg/l PO₄⁻P
- **Accuracy**: ± 2 %, ± 0.05 mg/l

### PO4
- **MR2**: 0.10 to 20.00 mg/l NH₄⁻N
- **Displayed**: 0.00 to 20.00 mg/l NH₄⁻N
- **Resolution**: 0.01 mg/l NH₄⁻N
- **Accuracy**: ± 3 %, ± 0.10 mg/l

### PO4
- **MR2**: 0.2 to 50.0 mg/l PO₄⁻P
- **Displayed**: 0.0 to 50.0 mg/l PO₄⁻P
- **Resolution**: 0.05 mg/l PO₄⁻P
- **Accuracy**: ± 2 %, ± 1.0 mg/l

### Sample Time Intervals
- 1 channel: 10 minutes; 2 channel: 20 minutes

### Sample streams/channels
- 1- and 2-channel versions available

### Cleaning
- Automatic cleaning with cleaning solutions

### 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

---

# Order information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alyza IQ for Ammonium measurement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alyza IQ NH4-111</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>825011Y</td>
</tr>
<tr>
<td>Alyza IQ NH4-112</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>825012Y</td>
</tr>
</tbody>
</table>

| **Reagent sets** | | |
| Reagent sets | | |
| R-Set NH4/1-1 | Reagents for Alyza IQ NH4, when using MR1 | 827540Y |
| R-Set NH4/1-2 | Reagents for Alyza IQ NH4, when using MR2 | 827541Y |
| SC-Set NH4/1-0/1 | Calibration standards and cleaning solution for Alyza IQ NH4, when using MR1; Calibration standards with 0 mg/l and 1 mg/l | 827545Y |
| SC-Set NH4/1-0/4 | Calibration standards and cleaning solution for Alyza IQ NH4, when using MR1; Calibration standards with 0 mg/l and 4 mg/l | 827546Y |
| SC-Set NH4/1-2_0/16 | Calibration standards and cleaning solution for Alyza IQ NH4, when using MR2; Calibration standards with 0 mg/l and 16 mg/l | 827547Y |

| **Alyza IQ for Orthophosphate measurement** | | |
| Alyza IQ PO4-111 | 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. | 825511Y |
| Alyza IQ PO4-112 | 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. | 825512Y |
| Alyza IQ PO4-121 | 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. | 825521Y |
| Alyza IQ PO4-122 | 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. | 825522Y |

| **Reagent sets** | | |
| Reagent sets | | |
| R-Set PO4/1-1 | Reagents for Alyza IQ PO4-X1X with MR1 | 827550Y |
| R-Set PO4/1-2 | Reagents for Alyza IQ PO4-X2X with MR2 | 827551Y |
| SC-Set PO4/1-1_0/1 | Calibration standards and cleaning solution for Alyza IQ PO4-X1X with MR1; Calibration standards with 0 mg/l and 1 mg/l | 827555Y |
| SC-Set PO4/1-1_0/10 | Calibration standards and cleaning solution for Alyza IQ PO4-X1X with MR1; Calibration standards with 0 mg/l and 10 mg/l | 827556Y |
| SC-Set PO4/1-2_10/40 | Calibration standards and cleaning solution for Alyza IQ PO4-X2X with MR2; Calibration standards with 10 mg/l and 40 mg/l | 827557Y |
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