

# IQ SensorNet PO4 Analyzer

ALYZA ORTHOPHOSPHATE ANALYZER



**YSI's Alyza Analyzer for Orthophosphate provides accurate, reliable measurements for process control. The IQ Analyzer features a revolutionary MultiValve that dramatically reduces reagent use and maintenance requirements.**

The Alyza PO4 is an online, cabinet-style analyzer used for continuous monitoring of orthophosphate in a municipal water resource recovery facility. This analyzer is weatherproof and can be deployed anywhere in the wastewater treatment process. Applications include monitoring bio-p removal and monitoring and controlling chemical phosphorus removal. The analyzer is available as a single-channel or two-channel instrument allowing you to sample from two different locations. It can be used as a stand-alone analyzer or be incorporated into an IQ SensorNet network of sensors.

- Extremely low reagent consumption, 5  $\mu$ L per measurement
- Reliable sample delivery pump built into the cabinet
- Automatic cleaning, lower maintenance requirements
- Automatic calibration, 1 or 2 point
- Filtration unit allows analyzer to process samples with solids concentrations up to 6,000 mg/L
- Uses Vanadomolybdate (yellow) method of detection



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PO4 Analyzer Specifications			
Measuring Method	Molybdate vanadate method (Yellow method)		
Measuring Range (Instrument dependent)	<table border="0"> <tr> <td style="vertical-align: top;"> <b>PO4-111/112</b>                      MR 1: 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 %, ± 0.02 mg/l                 </td> <td style="vertical-align: top;"> <b>PO4-121/122</b>                      MR 2: 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 %, ± 0.2 mg/l                 </td> </tr> </table>	<b>PO4-111/112</b> MR 1: 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 %, ± 0.02 mg/l	<b>PO4-121/122</b> MR 2: 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 %, ± 0.2 mg/l
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pH Range	5 to 9		
Sample Temperature	39 to 104 °F (4 to 45 °C)		
Solids Contents	< 6 g/l (before filtration)		
Filtration Unit	Filter/PC, FM-Case/PC (please order separately)		
Cleaning	Automatic cleaning with cleaning solution		
Calibration	Automatic 1- and 2-point calibration		
Ambient Conditions	Operational temperature: -4 to +104 °F (-20 to +40 °C); Storage temperature: -4 to +122 °F (-20 to +50 °C)		
Electrical Connection	120 VAC / 240 VAC, 50/60 Hz		
Mechanics	Housing: powder-coated aluminum, UV resistant; Overflow vessel: PMMA		
Weight	Approx. 81.6 lb (37 kg) (without liquids)		
Warranty	2 years		

## PO4 Analyzer Ordering Information

Alyza IQ PO4-111	PO4 analyzer, 1-channel, with MR 1, yellow method, connects to IQ SensorNet controllers 2020 or 282/284, provides 10 W to IQ SensorNet; including 2 m SNIQ cable, reagent sets need to be ordered separately	825 511Y
Alyza IQ PO4-112	PO4 analyzer, 2-channel, with MR 1, yellow method, connects to IQ SensorNet controllers 2020 or 282/284, provides 10 W to IQ SensorNet; including 2 m SNIQ cable, reagent sets need to be ordered separately	825 512Y
Alyza IQ PO4-121	PO4 analyzer, 1-channel, with MR 2, yellow method, connects to IQ SensorNet controllers 2020 or 282/284, provides 10 W to IQ SensorNet; including 2 m SNIQ cable, reagent sets need to be ordered separately	827 521Y
Alyza IQ PO4-122	PO4 analyzer, 2-channel, with MR 2, yellow method, connects to IQ SensorNet controllers 2020 or 282/284, provides 10 W to IQ SensorNet; including 2 m SNIQ cable, reagent sets need to be ordered separately	827 522Y
R-Set PO4/1-1	Reagents for Alyza IQ PO4-X1X with MR 1	827 550Y
R-Set PO4/1-2	Reagents for Alyza IQ PO4-X2X with MR 2	827 551Y
SC-Set PO4/1-1_0/1	Calibration standards and cleaning solution for Alyza IQ PO4-X1X with MR 1; Calibration standards with 0 mg/l and 1 mg/l	827 555Y
SC-Set PO4/1-1_0/10	Calibration standards and cleaning solution for Alyza IQ PO4-X1X with MR 1; Calibration standards with 0 mg/l and 10 mg/l	827 556Y
SC-Set PO4/1-2_10/40	Calibration standards and cleaning solution for Alyza IQ PO4-X2X with MR 2; Calibration standards with 10 mg/l and 40 mg/l	827 557Y

	Filter/PC	Filter Pump
Materials	Housing: PVC Membrane: Chlorinated Polyethylene	Housing: Polypropylene Membrane: PTFE Pump head: Polypropylene Valves: FPM
Dimensions	Frame: 27 x 36 x 3 cm; 10.63 x 14.17 x 1.18 in (W x L x H) Including air pressure connector: 27 x 38 x 3 cm; 10.63 x 14.96 x 1.18 in (W x L x H)	Housing: 12 x 19 x 15 cm; 4.72 x 7.48 x 5.9 in (W x L x H) Including air pressure connector: 12 x 23 x 15cm; 4.72 x 9.06 x 5.9 in (W x L x H)
Maximum Distance Analyzer Sample	20m; 65.61 ft	20m; 65.61 ft



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