xylem
Let's Solve Water

NEW
for IQ Sensor Net

Alyza IQ: The Simple choice for PO₄ Analyzers

WTW
a **xylem** brand

How much reagent does your analyzer use?

Less Reagents

Minimized reagent consumption and waste

Simple Service

Regular maintenance takes just 10 minutes every 3 months

Better Data

Reliable results from low to high measuring levels

TresCon®

P 700 IQ

Alyza IQ

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.

IQ SENSOR NET

The Alyza IQ PO4 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

Learn more about Alyza IQ PO4 on our website:
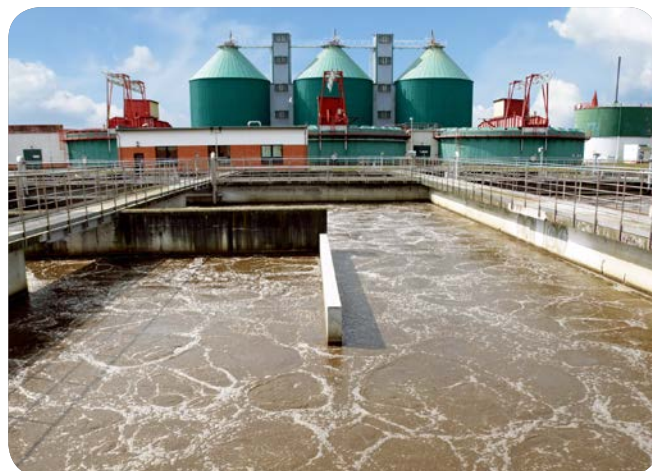www.WTW.com/Alyza-IQ

Orthophosphate measurement

Method

Molybdate-Vanadate method (Yellow method)

In the Molybdate Vanadate process, Orthophosphate (dissolved PO_4^{3-}) is detected. Thereby, a color reagent consisting of Molybdate and Vanadate is added to the sample. Under acid consitions, the PO_4^{3-} ions are integrated into the generated polyanions. The intensity of the occurring yellow color depends on the concentration of PO_4^{3-}. Subsequently, the sample is analyzed in the photometer at approx. 420 nm.

Fields of application

Precipitation control

- Automatic cleaning reduces maintenance effort and increases operational safety

- Reduction of precipitant costs without overdosing by reliable and fast measurement

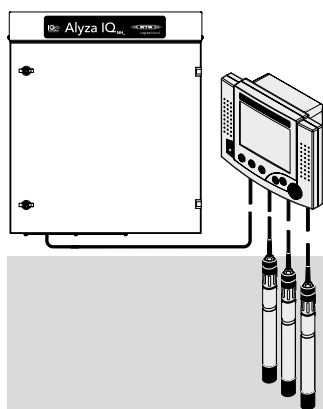- One instrument for up to two sample streams

Wastewater treatment plant effluent monitoring

- Precise results via automatic 1- and 2-point calibration

- Easier everyday life due to self diagnostics with display of reagent lifetime

- Requirements for further decreasing effluent values are not a problem due to low measuring range

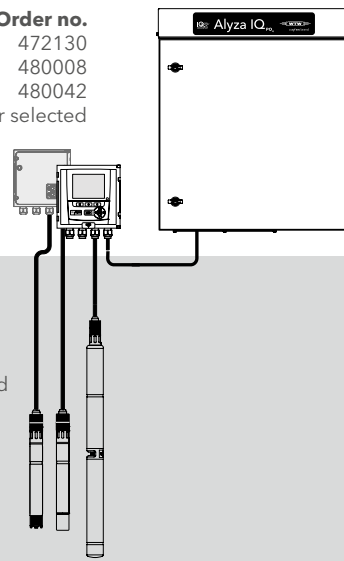# Configuration examples Alyza IQ PO4 in IQ Sᴇɴsᴏʀ Nᴇᴛ

Example 1 – System 2020

Example configuration	Order no.
MIQ/TC 2020 3G	470022
MIQ/JB	480008
SACIQ-7,0	480042
IQ Sensors	user selected

- MIQ/TC 2020 3G (terminal/controller)
- MIQ/JB (module for system expansion)
- Alyza IQ PO4 (Analyzer incl. SNCIQ cable and power supply)

Additional hardware required:
- 3 SACIQ (sensor cables)
- 3 IQ sensors (e.g. turbidity, NH4, 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

- DIQ/S 284-CR6 (controller)
- Alyza IQ PO4 (analyzer incl. SNCIQ cable and power supply)

Additional hardware required:
- 2 SACIQ (sensor cables)
- 2 IQ sensors (e.g. oxygen, NH4)
- 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 PO4
Measurement method	Molybdate-Vanadate method (Yellow method)
Measurement range	One measuring range
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

MR1:	0.02 … 15.00 mg/l PO4-P
Displayed:	0.00 … 15.00 mg/l PO4-P
Resolution:	0.01 mg/l PO4-P
Accuracy:	±2 % ±0.02 mg/l
MR2:	0.2 … 50.0 mg/l PO4-P
Displayed:	0.0 … 50.0 mg/l PO4-P
Resolution:	0.05 mg/l PO4-P
Accuracy:	±2 % ±0.2 mg/l

For further technical data please see datasheets D2.25

Order information

Model	Description	Order no.
Alyza IQ PO4-111	PO4 analyzer, 1-channel, with MR1, yellow method, connectable to IQ Sᴇɴsᴏʀ Nᴇᴛ Systems 2020 and 282/284, provides 10 W to the IQ Sᴇɴsᴏʀ Nᴇᴛ; including 2 m SNCIQ cable; reagents need to be ordered separately	825511
Alyza IQ PO4-112	PO4 analyzer, 2-channel, with MR1, yellow method, connectable to IQ Sᴇɴsᴏʀ Nᴇᴛ Systems 2020 and 282/284, provides 10 W to the IQ Sᴇɴsᴏʀ Nᴇᴛ; including 2 m SNCIQ cable; reagents need to be ordered separately	825512
Alyza IQ PO4-121	PO4 analyzer, 1-channel, with MR2, yellow method, connectable to IQ Sᴇɴsᴏʀ Nᴇᴛ Systems 2020 and 282/284, provides 10 W to the IQ Sᴇɴsᴏʀ Nᴇᴛ; including 2 m SNCIQ cable; reagents need to be ordered separately	825521
Alyza IQ PO4-122	PO4 analyzer, 2-channel, with MR2, yellow method, connectable to IQ Sᴇɴsᴏʀ Nᴇᴛ Systems 2020 and 282/284, provides 10 W to the IQ Sᴇɴsᴏʀ Nᴇᴛ; including 2 m SNCIQ cable; reagents need to be ordered separately	825522
Reagent sets		
R-Set PO4/1-1	Reagents for Alyza IQ PO4-X1X with MR1	827550
R-Set PO4/1-2	Reagents for Alyza IQ PO4-X2X with MR2	827551
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	827555
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	827556
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	827557