xylem

Let's Solve Water

Small System, Great Performance

IQ Sᴇɴsᴏʀ Nᴇᴛ SYSTEM 282/284: CONTROLLER FOR TWO OR FOUR SENSORS

WTW

a **xylem** brand

Controller for all measuring tasks

System 282/284 for small and mid-sized wastewater treatment plants

- Connect up to four sensors

- Measure up to 20 parameters

- USB and data logger per default

- Remote operation any time

- Profinet and more protocols

IQ SENSOR NET

The system 282/284 on the internet

More pictures, technical data and information on our sensors can be found at
www.WTW.com/en/iqsn-282_284
(For convenience use our QR code)

BOD

COD

PO_4

NO_X

NO_2

NO_3

NH_4

TSS

Turb

Cond

ORP

pH

O_2

TOC
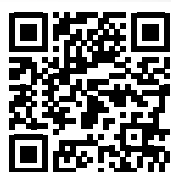
DOC

SAC

UVT

Sludge

Color

This makes the difference:

All parameters at a glance

If O_2, COD, PO_4 or sludge level - up to 20 parameters at once. The intuitive software and a large graphic display promise full overview.

Up-to-date and safe with USB interface and data logger

USB interface and data logger enable updates and logging in a breath. Without technician, anytime and free of charge.

Convenient and available anytime via internet

The connection to the internet enables the access to the IQ SENSOR NET anytime at any place. Monitoring and support from remote saves time, money and nerves.

Application examples

USB interface and internal data logger

- USB interface as standard

- Integrated data logger

- Software updates easy & free-of-charge

- High protection IP67

System 282/284 with USB interface and integrated data logger as standard

Convenient from remote

- Settings via Smartphone

- Webbrowser function (IQ WEB CONNECT)

- Convenient maintenance from remote

- Profinet, Ethernet/IP, Modbus TCP, Profibus, Modbus RTU

Convenient control via Smartphone

Efficient P removal with Alyza IQ PO$_4$

- Efficient phosphate removal

- Two measurement ranges at one unit

- Integrated pump

- Low reagent consumption

- Automated calibration with standards

Alyza IQ PO$_4$ for phosphate removal control

Monitoring of COD

- Reagent-free measurement of COD
- Up to 5 parameters simultaneously
- Low maintenance by integrated ultrasonic cleaning
- Precise optical measurement

Up to 5 parameters with one sensor at system 282/284

Sludge level measurement with IFL 700 IQ

- Optimized measurement location
- Easy installation
- Plotting of Echo profile
- Radio connection via MIQ/WL PS SET

Optimal sludge level measurement with system 282/284 and radio connection

Optimization of biological treatment

- With calibration free FDO 700 IQ
- NH_4, NO_3, K & Cl in one controller
- Matrix adjustment fast & easy
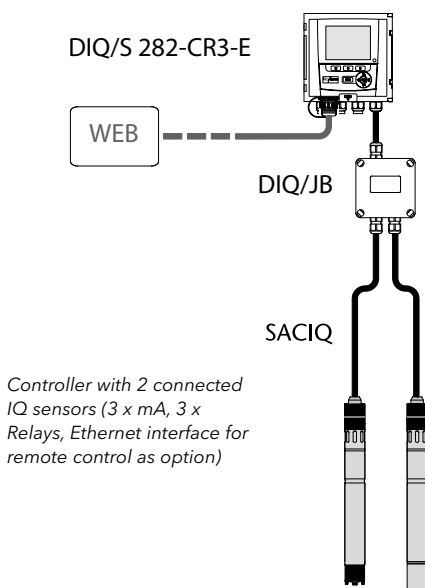- Simple change of electrodes as required

System 282/284 for optimization of biological treatment

Configuration examples digital systems
## IQ Sensor Net System 282/284

Example 1

Example with 2 IQ sensors	Order no.
DIQ/S 282-CR3-E	472 113
2 x SACIQ-7,0	480 042
DIQ/JB	472 005
2 x IQ sensors	user selected

DIQ/S 282-CR3-E

WEB

DIQ/JB

SACIQ

Controller with 2 connected IQ sensors (3 x mA, 3 x Relays, Ethernet interface for remote control as option)

Example 2

Example with 4 IQ sensors	Order no.
DIQ/S 284-CR6-E	472 133
4 x SACIQ-7,0	480 042
DIQ/JB	472 005
4 x IQ sensors	user selected

DIQ/S 284-CR6-E

WEB

DIQ/JB

SACIQ   SACIQ
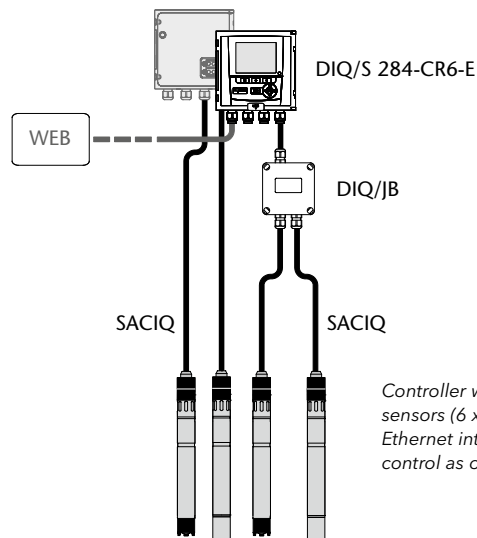
Controller with 4 connected IQ sensors (6 x mA, 6 x Relays, Ethernet interface for remote control as option)

Example 3

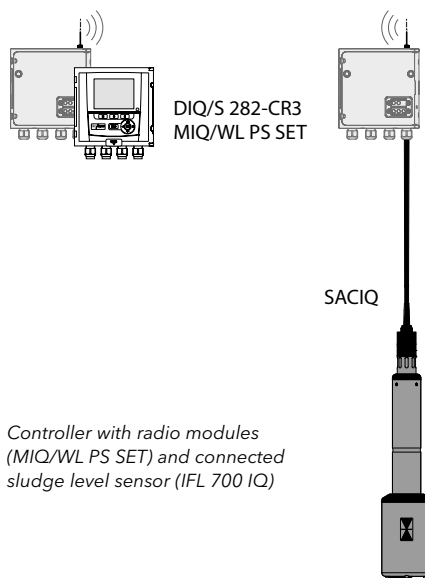| Sludge level measurement	Order no.
DIQ/S 282-CR3	472 110
1 x MIQ/WL PS SET	480 025
1 x SACIQ-7,0	472 042
IFL 700 IQ	481 200

DIQ/S 282-CR3
MIQ/WL PS SET

SACIQ

Controller with radio modules (MIQ/WL PS SET) and connected sludge level sensor (IFL 700 IQ)

Installation accessories (selection)

For mounting of sensors, transmitters and modules we recommend our installation accessories.

For example 1	Description	Order No.
Installation set for 2 sensors and 1 controller	IN/SET2	109305
For example 2		
Installation set for 2 sensors and 1 controller	IN/SET2	109305
Junction clamp for mounting 2nd boom	MS/KK 170	109290
Boom for sensor mounting	EH/F 170-1,5	109272
Twin sensor holder	EH2/U 170	109323
For example 3		
Installation set for 1 sensor and 1 controller	IN/SET1	109304
Sun shield for 1 controller	SSH/IQ	109295
Mounting set for sun shield	MR/SD 170	109286

Example 4

Phosphate measurement and Ethernet	Order no.
DIQ/S 282-EF	472 114
1 x Alyza IQ PO$_4$ -111	825 511
SNCIQ	480 046

DIQ/S 282-EF
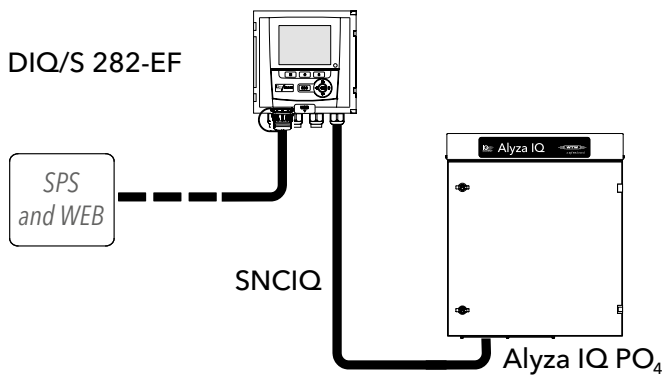
Controller with connected Alyza IQ PO$_4$ (3 x Relays, Ethernet interface for remote control and equipped with field busses to transfer data to a PLC)

Example 5

| Spectral sensor and PROFIBUS	Order no.
DIQ/S 282-PR	472 111
1 x SACIQ-7,0	480 042
1 spectral sensor	user selected

DIQ/S 282-PR
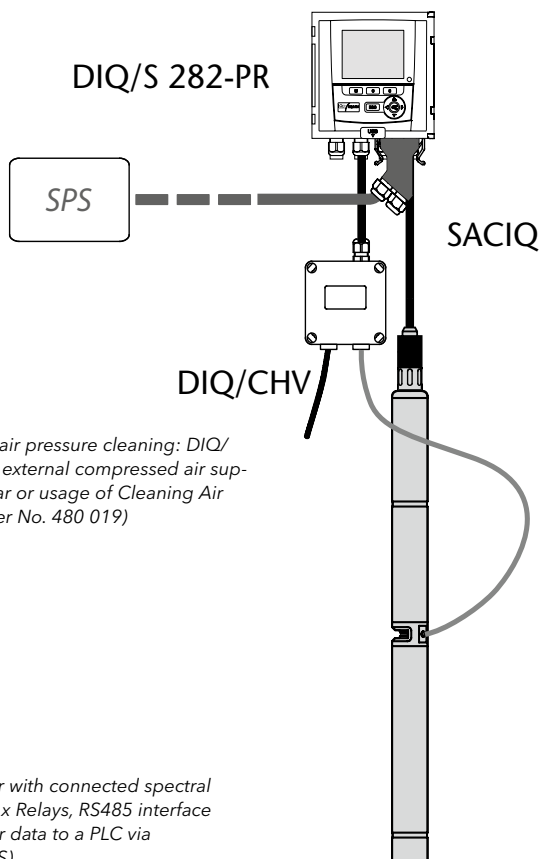
Optional air pressure cleaning: DIQ/ CHV with external compressed air supply 3-5 bar or usage of Cleaning Air Box (Order No. 480 019)

Controller with connected spectral sensor (3 x Relays, RS485 interface to transfer data to a PLC via PROFIBUS)

Installation accessories (selection)

For mounting of sensors, transmitters and modules we recommend our installation accessories.

For example 4	Description	Order No.
Sun shield for 1 controller	SSH/IQ	109295
Mounting set for sun shield	MR/SD 170	109286
Clamp for rail mounting	RM	821988

For example 5	Description	Order No.
Installation set for 1 sensor and 1 controller	IN/SET1	109304
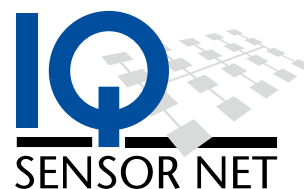
Accessories IQ SENSOR NET*

*For additional accessories, visit our website:
https://www.xylemanalytics.com/en/ products/accessories/accessories
(For convenience use our QR code).

Technical data

Connectable sensors	all IQ sensors, at DIQ/S 282: 2, at DIQ/S 284: 4
Parameters	pH/ORP, O_2, Cond, Turbidity, TSS, NH_4^+, NO_2^-, NO_3^-, NO_x, PO_4, COD, BOD, TOC, DOC, SAC, UVT, sludge level, color
Interfaces	USB and data logger (as standard); as option: PROFIBUS (RS 485) or MODBUS (RS 485) or Ethernet/IP, MODBUS TCP, PROFINET (RJ45) or RJ45 for remote control
Overall cable length	250 m (820 ft.)
Power supply	Wide range power supply (100 … 240 VAC) or 24 V

Order information

Model	Description	Order No.
Controller for up to 2 sensors		
DIQ/S 282-CR3	Controller for 2 IQ sensors, with 3 x 0(4) … 20 mA, 3 x Relays	472 110
DIQ/S 282-PR	Controller for 2 IQ sensors, with PROFIBUS connection, 3 x Relays	472 111
DIQ/S 282-MOD	Controller for 2 IQ sensors, with MODBUS connection, 3 x Relays	472 112
DIQ/S 282-CR3-E	Controller for 2 IQ sensors, with 3 x 0(4) … 20 mA, 3 x Relays, with RJ45 interface for internet access and remote control	472 113
DIQ/S 282-EF	Controller for 2 IQ sensors, with Ethernet fieldbuses, internet access and remote control, 3 x Relays	472 114
Controller for up to 4 sensors		
DIQ/S 284-CR6	Controller for 4 IQ sensors, with 6 x 0(4) … 20 mA, 6 x Relays	472 130
DIQ/S 284-PR	Controller for 4 IQ sensors, with PROFIBUS connection, 3 x Relays	472 131
DIQ/S 284-MOD	Controller for 4 IQ sensors, with MODBUS connection, 3 x Relays	472 132
DIQ/S 284-CR6-E	Controller for 4 IQ sensors, with 6 x 0(4) … 20 mA, 6 x Relays, with RJ45 interface for internet access and remote control	472 133
DIQ/S 284-EF	Controller for 4 IQ sensors, with Ethernet fieldbuses, internet access and remote control, 3 x Relays	472 134
Connectable sensors (selection)		
FDO® 700 IQ	Calibration free, optical sensor for O_2	201 650
VARiON®^{Plus} AN/A comp SET NH_4 & NO_3	Electrochemical ISE sensor for NH_4, NO_3 and K	107 066
VisoTurb® 700 IQ	Optical sensor for turbidity with ultrasonic cleaning	600 010
ViSolid® 700 IQ	Optical sensor for Suspended Solids with ultrasonic cleaning	600 012
CarboVis® 705 IQ	Spectral sensor with ultrasonic cleaning for COD, BOD, TOC, DOC, SAC and UVT	481 050
NiCaVis® 701 IQ NI	Spectral sensor with ultrasonic cleaning for COD, BOD, TOC, DOC, NO_3 and NO_2	481 054
UV 701 IQ SAC	Single wavelength sensor with ultrasonic cleaning for SAC and UVT	481 036
Alyza IQ PO_4-111	Wet chemical analyzer for Ortho-Phosphate	825 511
IFL 700 IQ	Ultrasonic sensor for sludge level	481 200