

PROFINET
Overvoltage
protection
Remote control

Small System, Great Performance

IQ SENSOR NET SYSTEM 282/284: CONTROLLER FOR TWO OR FOUR SENSORS



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

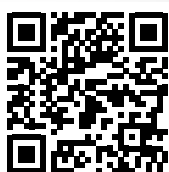


The system 282/284 on the internet

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)





TOC

DOC

SAC

UVT

Sludge

Color



This makes the difference:



All parameters at a glance

If O₂, COD, PO₄ 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 PO₄

- Efficient phosphate removal
- Two measurement ranges at one unit
- Integrated pump
- Low reagent consumption
- Automated calibration with standards



Alyza IQ PO₄ 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



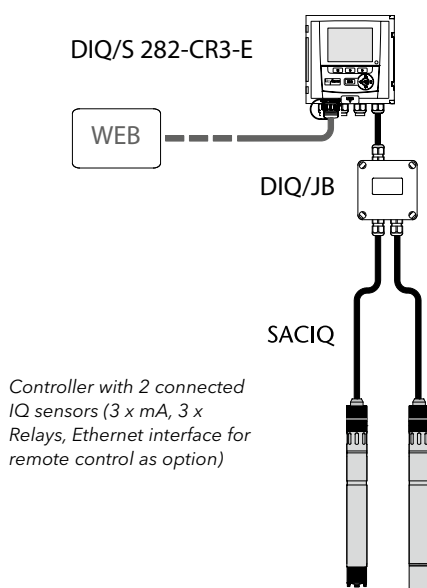
System 282/284 for optimization of biological treatment

Configuration examples digital systems

IQ SENSOR NET System 282/284

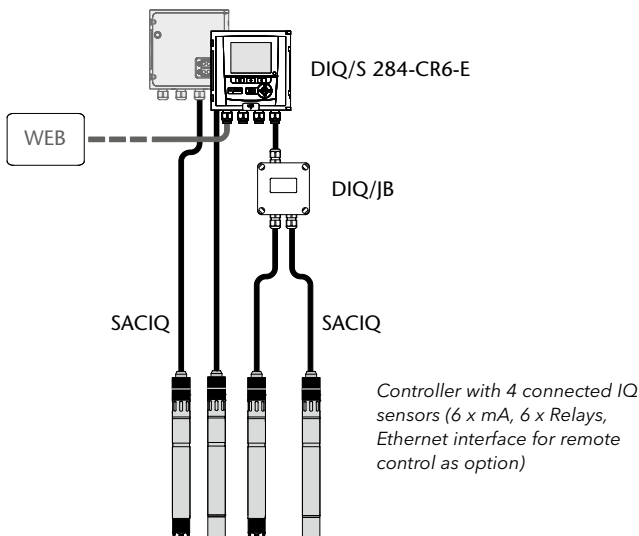
Example 1

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



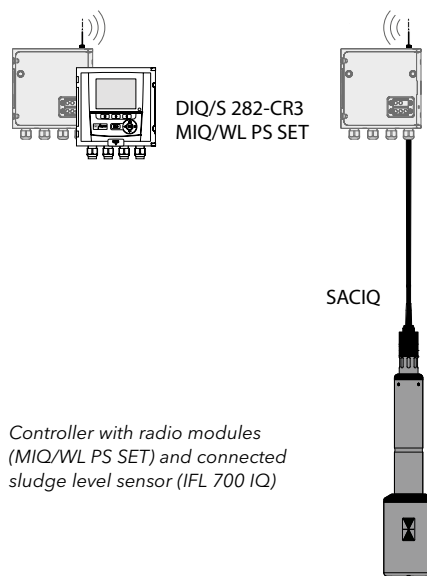
Example 2

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



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



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

DIQ/S 282-EF

1 x Alyza IQ PO₄ -111

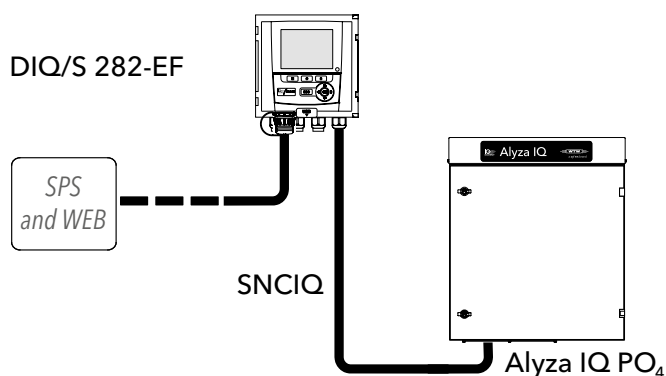
SNCIQ

Order no.

472 114

825 511

480 046



Controller with connected Alyza IQ PO₄
(3 x Relays, Ethernet interface for remote
control and equipped with field busses to
transfer data to a PLC)

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

Example 5

Spectral sensor and PROFIBUS

DIQ/S 282-PR

1 x SACIQ-7,0

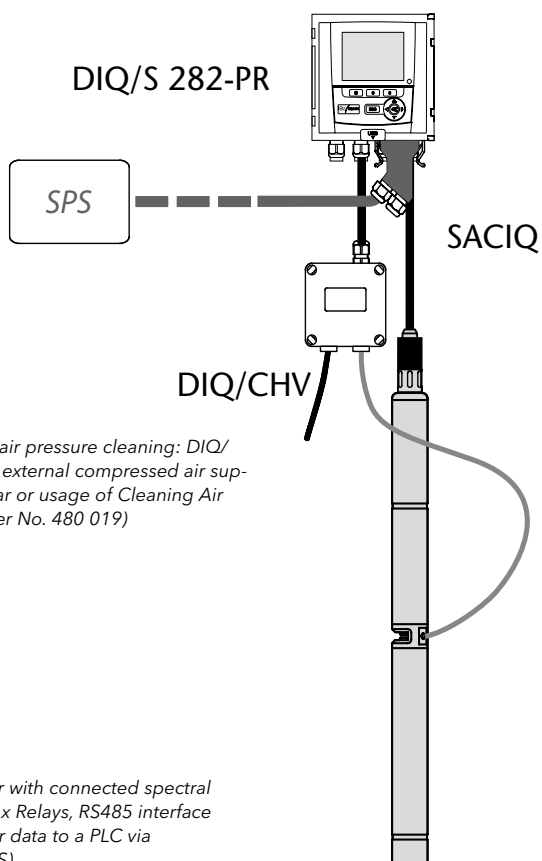
1 spectral sensor

Order no.

472 111

480 042

user selected



Optional air pressure cleaning: DIQ/
CHV with external compressed air sup-
ply 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)

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](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® <i>Plus</i> 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