



IQ SensorNet

282 / 284 CONTROLLER

IQSN Brochure
W92-02



a xylem brand

The new controller for all IQ SensorNet sensors

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

- Up to 4 sensors and 20 parameters with one controller
- USB interface and data logger
- Access data anytime via the internet



Why choose the 282/284?



Up to 20 parameters at once

Monitor up to 20 parameters at once, including Orthophosphate and sludge level. The intuitive software and a large graphic display make it easy to use.



USB interface and data logger ensures your system is up-to-date and secure

USB interface and data logger enables simple updates and data downloads you can do yourself.



Convenient and available at anytime via the internet

Connection to the internet enables access to the IQ SENSORNET and your data at anytime and any place. Monitoring remotely saves time and money.



Application examples

Monitoring of COD

- Reagent-free measurement of COD
- Monitor up to 5 parameters simultaneously
- Low maintenance with integrated ultrasonic cleaning
- Precise optical measurement



Monitor up to 5 parameters on one sensor with the 282/284 controller

Sludge level measurement with IFL 700 IQ

- Optimized measurement location
- Easy installation
- Plotting of echo profile
- Wireless connection available via MIQ/WL PS SET



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

Efficient phosphorus removal with P700 IQ

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



System 282/284 with Orthophosphate analyzer P700 IQ

Technical data

Sensor Options	All IQ sensors, DIQ/S 282: 2 sensors, DIQ/S 284: 4 sensors
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
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
Enclosure	IP67 rating
Display	Graphic color display, backlit
Warranty	3 years

Order information

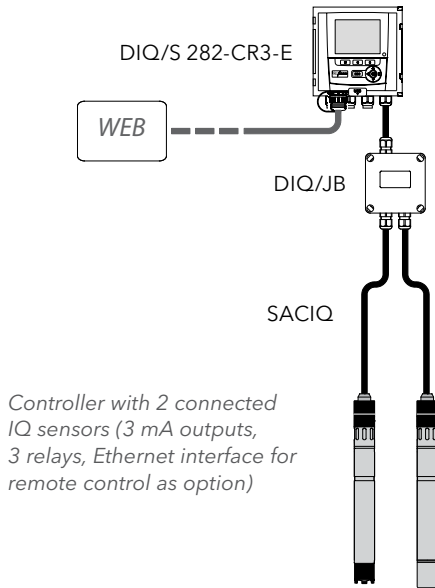
Model	Description	Order No.
Controller for up to 2 sensors		
DIQ/S 282-CR3	Controller for 2 IQ sensors, with 3 analog outputs, 3 relays	472 110Y
DIQ/S 282-PR	Controller for 2 IQ sensors, with PROFIBUS connection, 3 relays	472 111Y
DIQ/S 282-MOD	Controller for 2 IQ sensors, with MODBUS connection, 3 relays	472 112Y
DIQ/S 282-CR3-E	Controller for 2 IQ sensors, with 3 analog outputs, 3 relays, with RJ45 interface for internet access and remote control	472 113Y
DIQ/S 282-EF	Controller for 2 IQ sensors, with Ethernet fieldbuses, internet access and remote control, 3 relays	472 114Y
Controller for up to 4 sensors		
DIQ/S 284-CR6	Controller for 4 IQ sensors, with 6 analog outputs, 3 relays	472 130Y
DIQ/S 284-PR	Controller for 4 IQ sensors, with PROFIBUS connection, 3 relays	472 131Y
DIQ/S 284-MOD	Controller for 4 IQ sensors, with MODBUS connection, 3 relays	472 132Y
DIQ/S 284-CR6-E	Controller for 4 IQ sensors, with 6 analog outputs, 6 relays, with RJ45 interface for internet access and remote control	472 133Y
DIQ/S 284-EF	Controller for 4 IQ sensors, with Ethernet fieldbuses, internet access and remote control, 3 relays	472 134Y
Sensor Options		
FDO® 700 IQ	Calibration free, optical sensor for O ₂	201 650Y
VARiON® <i>Plus</i> AN/A	Electrochemical ISE sensor for NH ₄ , NO ₃ and K	107 066Y
VisoTurb® 700 IQ	Optical sensor for turbidity with ultrasonic cleaning	600 010Y
ViSolid® 700 IQ	Optical sensor for suspended solids with ultrasonic cleaning	600 012Y
Sensolyt 700 IQ	pH/ORP sensor with amplifier	109 170Y
CarboVis® 705 IQ	Spectral sensor with ultrasonic cleaning for COD, BOD, TOC, DOC, SAC and UVT	481 050Y
NiCaVis® 701 IQ NI	Spectral sensor with ultrasonic cleaning for COD, BOD, TOC, DOC, NO ₃ and NO ₂	481 054Y
UV 701 IQ SAC	Single wavelength sensor with ultrasonic cleaning for SAC and UVT	481 036Y
P700 IQ-I115	Wet chemistry analyzer for Orthophosphate	8P-111Y
IFL 700 IQ	Ultrasonic sensor for sludge level	481 200Y

Configuration examples digital systems

IQ SENSORNET System 282/284

Example 1

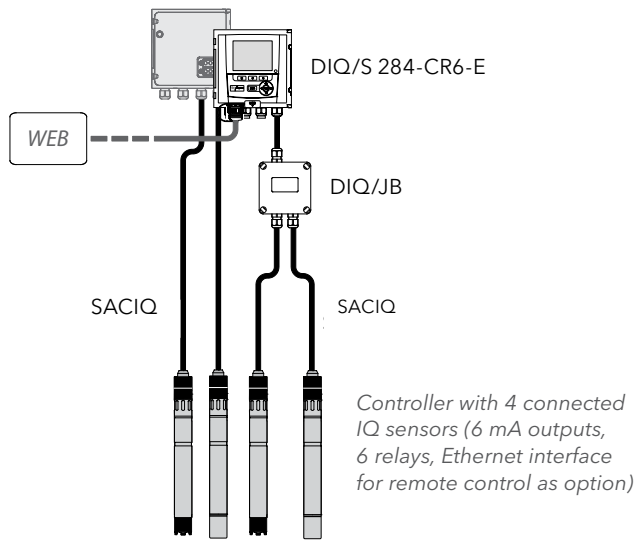
Example with 2 IQ sensors	Order no.
DIQ/S 282-CR3-E	472 113Y
2 x SACIQ-7,0	480 042Y
DIQ/JB	472 005Y
2 x IQ sensors	user selected



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

Example 2

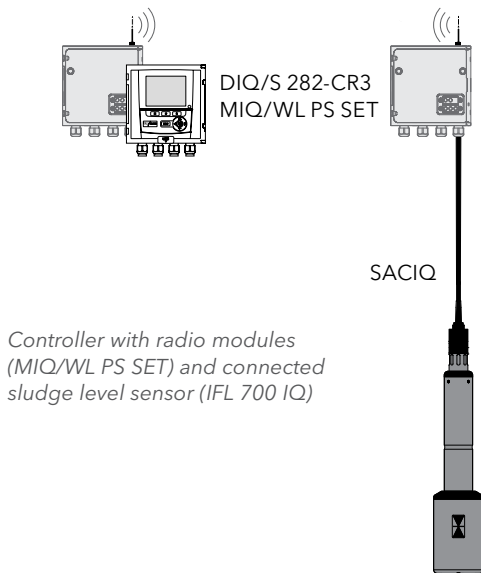
Example with 4 IQ sensors	Order no.
DIQ/S 284-CR6-E	472 133Y
4 x SACIQ-7,0	480 042Y
DIQ/JB	472 005Y
4 x IQ sensors	user selected



Controller with 4 connected IQ sensors (6 mA outputs, 6 relays, Ethernet interface for remote control as option)

Example 3

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



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

Installation accessories (selection)

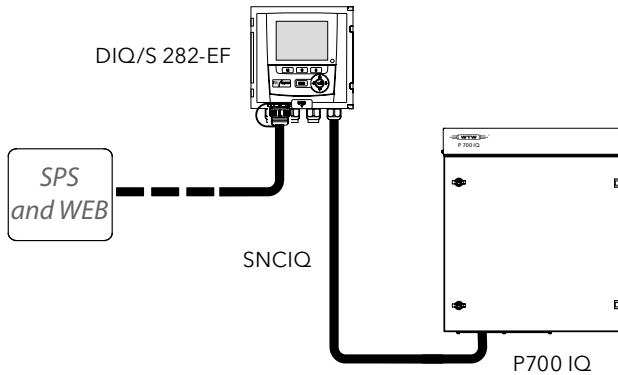
For mounting of sensors, transmitters and modules we recommend our installation accessories.

For Example 1	Description	Order No.
Installation set for 2 sensors and 1 controller	IN/SET2	109 305Y
For Example 2		
Installation set for 2 sensors and 1 controller	IN/SET2	109 305Y
Junction clamp for mounting 2nd boom	MS/KK 170	109 290Y
Boom for sensor mounting	EH/F 170-1,5	109 272Y
Twin sensor holder	EH2/U 170	109 323Y
For Example 3		
Installation set for 1 sensor and 1 controller	IN/SET1	109 304Y
Sun shield for 1 controller	SSH/IQ	109 295Y
Mounting set for sun shield	MR/SD 170	109 286Y

Example 4

Phosphate measurement and Ethernet

	Order no.
DIQ/S 282-EF	472 114Y
1 x P700 IQ-I115	8P-000Y
SNCIQ	480 046Y

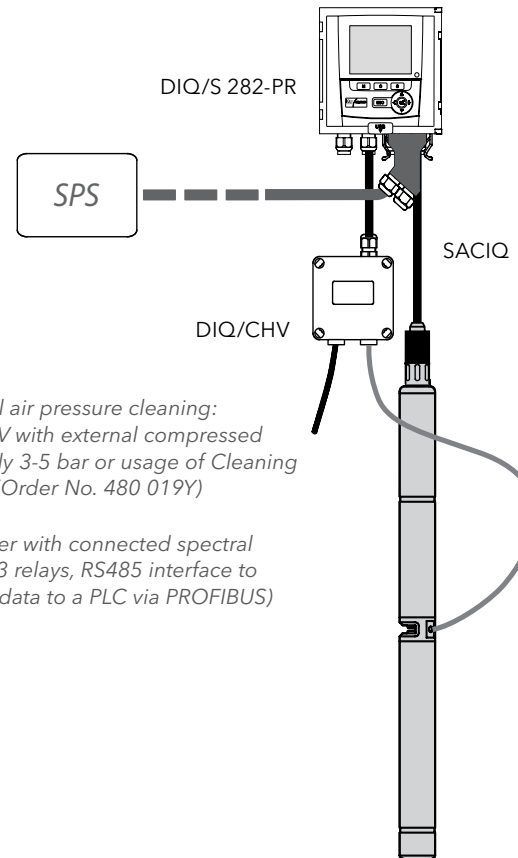


Controller with connected P700 IQ (3 relays, Ethernet interface for remote control and equipped with fieldbuses to transfer data to a PLC)

Example 5

Spectral sensor and PROFIBUS

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



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

Controller with connected spectral sensor (3 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	109 295Y
Mounting set for sun shield	MR/SD 170	109 286Y
Clamp for rail mounting	RM	821 988Y
For Example 5	Description	Order No.
Installation set for 1 sensor and 1 controller	IN/SET1	109 304Y



IQ SENSORNET Accessories*

*For additional accessories, visit our website: YSI.com/IQSN

Xylem |'ziləm|

- 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, and agricultural settings. With its October 2016 acquisition of Sensus, Xylem added smart metering, network technologies and advanced data analytics for water, gas and electric utilities to its portfolio of solutions. 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 xylem.com



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