



# The system 282/284

THE NEW CONTROLLER FOR THE IO SENSOR NET



a xylem brand

# The new one - for all IQ sensors

System 282/284 for small and midsized  
wastewater treatment plants

- Up to 4 sensors connect-  
able at once
- USB interface and  
data logger
- Available anytime via  
internet



The system 282/284 in the internet

More pictures, technical data and informa-  
tion on our sensors can be found at  
[www.WTW.com/en/iqsn-282\\_284](http://www.WTW.com/en/iqsn-282_284)  
(For convenience use our QR code)



OD Turb PO<sub>4</sub> TSS



This makes the difference:



**All parameters at a glance**

If O<sub>2</sub>, COD, PO<sub>4</sub> 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

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## Convenient from remote

- Settings via Smartphone
- Webbrowser function (IQ WEB CONNECT)
- Convenient maintenance from remote
- The only one with PROFINET



Convenient control via Smartphone

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## Efficient P elimination with P 700 IQ

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



System 282/284 with Phosphate analyzer P 700 IQ

## 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

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## 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

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## Optimization of biological treatment

- With calibration free FDO 700 IQ
- $\text{NH}_4$ ,  $\text{NO}_3$ , K & Cl in one controller
- Matrix adjustment fast & easy
- Simple change of electrodes as required



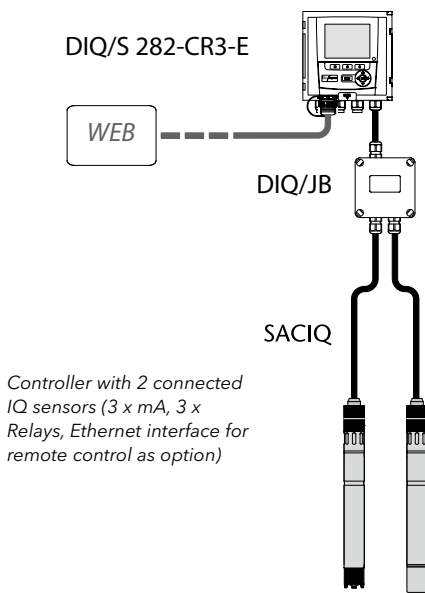
System 282/284 for optimization of biological treatment

# Konfiguration examples digital systems

## IQ SENSOR NET System 282/284

### Example 1

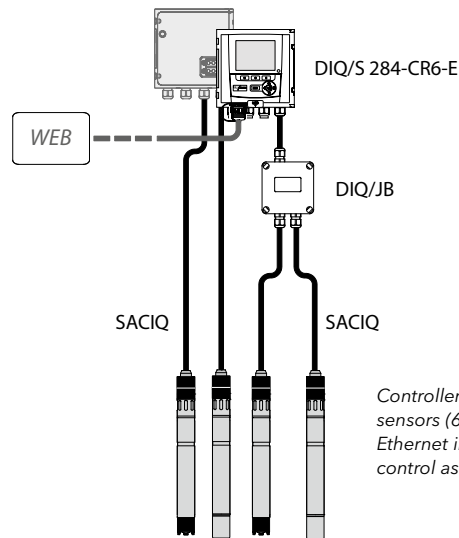
Example with 2 IQ sensors	Order no.
DIQ/S 282-CR3-E	472 113
2 x SACIQ-7,0	480 042
DIQ/JB	472 005
2 x IQ sensors	user selected



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

### Example 2

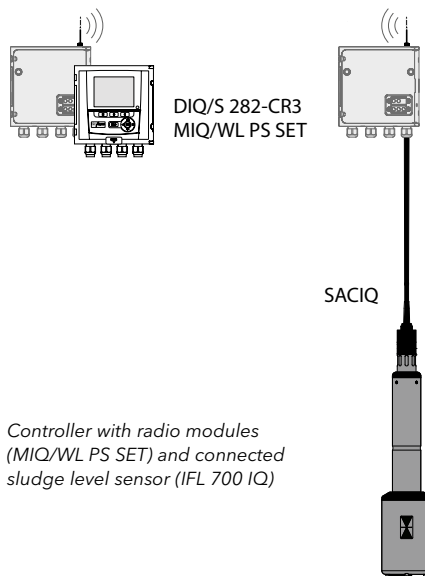
Example with 4 IQ sensors	Order no.
DIQ/S 284-CR6-E	472 133
4 x SACIQ-7,0	480 042
DIQ/JB	472 005
4 x IQ sensors	user selected



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

### Beispiel 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



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	109 305
<b>For example 2</b>		
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
<b>For example 3</b>		
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 P 700 IQ

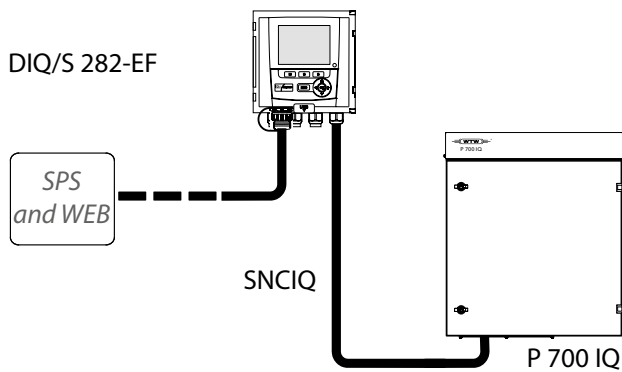
SNCIQ

Order no.

472 114

8P-100

480 046



Controller with connected P 700 IQ  
(3 x Relays, Ethernet interface for  
remote control and equipped with  
fieldbusses 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

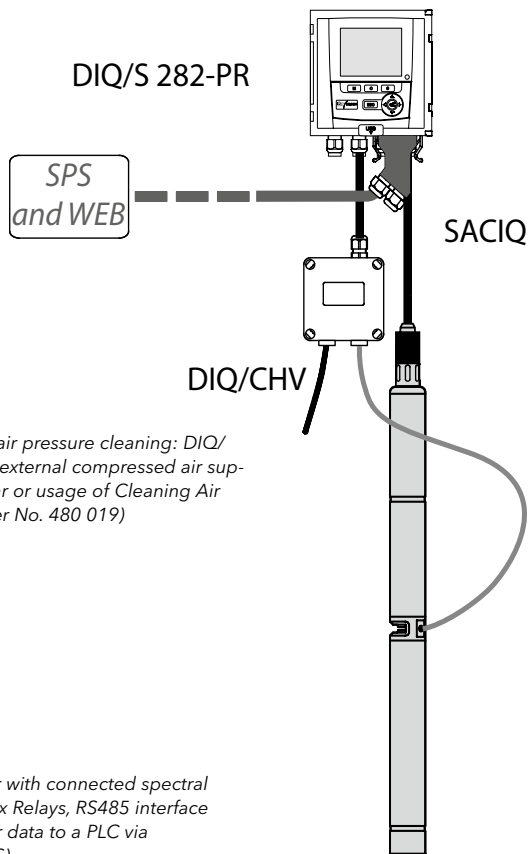
1 spectral sensor

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:

[www.WTW.com/en/onl-accessories](http://www.WTW.com/en/onl-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 <sub>2</sub> , Cond, Turbidity, TSS, NH <sub>4</sub> <sup>+</sup> , NO <sub>2</sub> <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , NO <sub>x</sub> , PO <sub>4</sub> , 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

## 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 <sub>2</sub>	201 650
VARION® <i>Plus</i> AN/A comp SET NH <sub>4</sub> & NO <sub>3</sub>	Electrochemical ISE sensor for NH <sub>4</sub> , NO <sub>3</sub> 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 <sub>3</sub> and NO <sub>2</sub>	481 054
UV 701 IQ SAC	Single wavelength sensor with ultrasonic cleaning for SAC and UVT	481 036
P 700 IQ-PO230	Wetchemical analyzer for Ortho-Phosphate	8P-111
IFL 700 IQ	Ultrasonic sensor for sludge level	481 200



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