

The system 282/284

THE NEW CONTROLLER FOR THE IQ SENSOR NET



a **xylem** brand

The new one for all IQ sensors

NO₂

NO₃

System 282/284 for small and midsized wastewater treatment plants

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



The system 282/284 in 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)



Turb PO₄ TSS

(WTW)=

3.90

346

2.29 🐯

OH

11.7 %





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

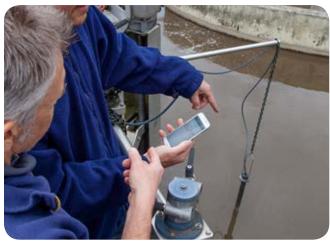
- USB interface as standard
- Integrated data logger
- Software updates easy & free-of-charge
- High protection IP67



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
- The only one with PROFINET



Convenient control via Smartphone

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

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
- NH4, NO3, K & Cl in one controller
- Matrix adjustment fast & easy
- Simple change of electrodes as required

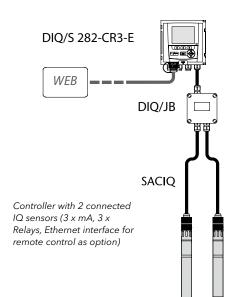


System 282/284 for optimization of biological treatment

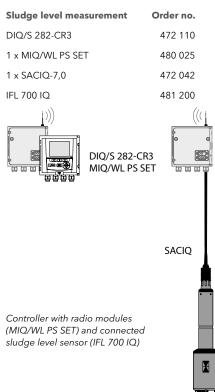
Configuration examples digital systems IQ SENSOR NET System 282/284

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 3



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 001 000 sensors (6 x mA, 6 x Relays, Ethernet interface for remote control as option)

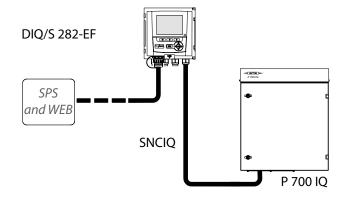
Installation accessories (selection)

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 P 700 IQ-I230 | 8P-100 |
| SNCIQ | 480 046 |



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 |

Controller with connected P 700 IQ (3 x Relays, Ethernet interface for remote control and equipped with fieldbusses to transfer data to a PLC)

Example 5

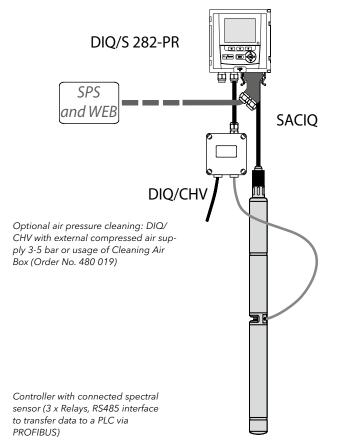
 Spectral sensor and PROFIBUS
 Order no.

 DIQ/S 282-PR
 472 111

 1 x SACIQ-7,0
 480 042

 1 spectral sensor
 user selected

| For example 5 | Description | Order No. |
|-------------------------------------|-------------|-----------|
| Installation set for 1 sensor and 1 | IN/SET1 | 109304 |
| controller | | |





Accessories IQ Sensor Net*

*For additional accessories, visit our
 website:
 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 ₂ , Cond, Turbidity, TSS, NH4 ⁺ , NO ₂ ⁻ , NO ₃ ⁻ , |
| | NO _x , PO4, 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 s | ensors | |
| 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 se | ensors | |
| 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 (s | selection) | |
| FDO [®] 700 IQ | Calibration free, optical sensor for O ₂ | 201 650 |
| VARiON ^{®Plus} AN/A comp SET NH4 & NO3 | 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 |
| 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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