System 182

Up to 4 digital sensors can be connected to this system – insofar the system 182 is perfectly designated for the operation or completion of single measuring points at wastewater plants:

System 182

- 1 to 4 sensors
- Digital outputs
- All IQ sensors can be connected

- Up to 4 senors can be connected out of a variety of 19 available digital sensors
- pH, ORP, D.O., conductivity, temperature and turbidity/ suspended solids, nutrient parameters ammonium, nitrate and COD can therefore be measured directly, in-situ
- Power supply through wide range mains converter (100-240 VAC) or 24 V alternative.
- Digital outputs PROFIBUS DP or MODBUS RTU
- · Analog model with up to 5 analog outputs and 6 relays

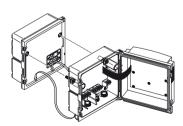
Module	DIQ/S 182	DIQ/S 182 XT	DIQ/S 182 XT-4
			NEW
Max. number of sensors	2	2	4
Plug connection for Bus	Plug connection for Bus 2 x mA (0) 4 - 20 mA 3 x relay	DIQ/S 182 XT 4 x mA (0) 4 - 20 mA 5 x relay	DIQ/S 182 XT-4 5 x mA (0) 4 – 20 mA 6 x relay
Models with digital output PROFIBUS	DIQ/S 182 PR Plug connection for Bus 3 x relay	_	DIQ/S 182 XT-4/ PR Plug connection for Bus 3 x relay
Models with digital output MODBUS	DIQ/S 182 PR Plug connection for Bus 3 x relay	_	DIQ/S 182 XT-4/ PR Plug connection for Bus 3 x relay

Display of measurement value and navigation



- Single or double display with or without additional measuring parameter (i.e. temperature)
- Simultaneous display of status for all relays and power outputs in one overview

Sensor connection and system extensions



- Any IQ sensor will be automatically recognized by the system and displayed after connection.
- On demand, an additional main power supply can be connected to extend power for sensors with an increased power consumption.
- With stack-mounting, both the mechanical and electrical connect is established.
- Cable lengths of up to 250 m within the system.

Linking module for sensors and magnetic valve modules for compressed-air cleaning



- (DIQ/JB): Connection of a second or further distant IQ sensor
- (DIQ/CHV): Integrated magnetic valve is directly controlled by a relay of the transmitter

Configuration Options for System 182

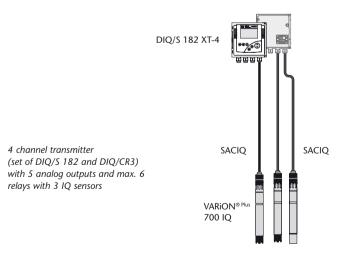
Example 1 Example 2 Example 3 **Configuration Example Configuration Example Configuration Example** Order No. Order No. Order No. **DIQ/S 182** 472 000 **DIQ/S 182 XT** 472 001 DIQ/S 182 XT-4 472 015 SACIO-7.0 480 042 2 x SACIO-7.0 480 042 4 x SACIQ-7,0 480 042 2 IQ Sensors DIQ/JB 472 005 IQ Sensor user selected user selected 4 IQ Sensors user selected DIQ/S 182 **DIQ/S 182 XT** DIQ/S 182 XT-4 DIQ/JB SACIQ SACIQ SACIO SACIQ **SACIQ** Transmitter with 1 direct connected 2 channel transmitter with 4 channel transmitter (set of DIQ/S 182 4 analog outputs (set of 10 sensor DIQ/S 182 and DIQ/CR3) with and DIQ/CR3) 2 direct connected IQ sensors with 5 analog outputs and max. 6 relays with 4 IQ sensors

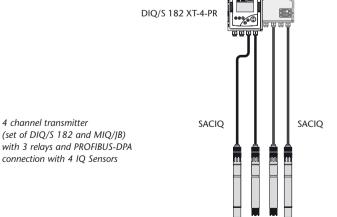
Single measuring point with analog outputs

Configuration Example Order No. DIQ/S 182 XT-4 472 015 3 x SACIQ-7,0 480 042 VARiON®Plus 700 IQ 107 066 2 IQ Sensors user selected

Single measuring point PROFIBUS / MODBUS

Configuration Example	Order No.
DIQ/S 182 XT-4-PR	472 017
4 x SACIQ-7,0	480 042
4 IQ Sensors	user selected





General Technical Data System 182 System			
Electromagnetic Compatibility	EN 61326, Emission: Class B, EMC for indispensable operation, FCC Class A		
Integrated Lightning Protection	According to EN 61326 enhanced overvoltage protection for the entire system		
Connection Medium Cable	IQ Sensor Net cable SNCIQ or SNCIQ/UG (underground cable with additional PVC coating): 2-wire with shield; $2 \times 0.75 \text{ mm}^2$; filler cord for easy connection of shield: 0.75 mm^2 ; pressure resistant to 10 bar		
Connection Characteristics	Power supply and data transmission on these wires; resistant to polarity reversal with respect to switched shield and inner conductor (no damage); comprehensive EMC shield control; Cable topology within the IQ Sensor Net system as required, e.g. in the form of a line, tree, star; total cable length ma 273 yds/250 m		
Connection Medium Radio	Radio transmission with a range of 100 m/109 yds (max. 300 m/328 yds)		
Connection Characteristics	Data transmission, separate power supply necessary for each island		
Monitors			
Display	Graphic display; resolution: 128 x 64 pixel; visible area: 2.83 x 1.57 in. (72 x 40 mm), black/white, backlit		
Control Functions/Function Keys	5 operating keys: 3 master keys for functions: measurement (M), calibration (C), set/system settings (S), 2 keys for: confirmation/switching menu O.K. (OK), escape (ESC) 2 knobs for rapid selection of software functions and input of alpha-numeric values (up), (down)		
Electric Supply	100 240 VAC (50/60 Hz), 24 V AC/DC		
MIQ Module Coupling at Rear	Combined mechanical and electrical connection for docking additional modules, additionally max. 2 modules as stack mounted unit		
Cable Feeds	4 screw cable glands M 16 x 1.5		
Terminal Connections	Screw terminal strips Terminal area for solid conductors: 0.2 4.0 mm ² Terminal area for flexible conductors: 0.2 2.5 mm ² accessible by opening cover		
IQ SENSOR NET Terminal Connections	Terminal connections for the IQ Sensor Net for connecting sensors		
Ambient Conditions	Operating temperature: -4 °F 131 °F (-20 °C +55 °C); Storage temperature: -13 °F 149 °F (-25 °C +65 °C)		
Housing Material	PC – 20 % GF (polycarbonate with 20 % fiberglass)		
Protection Rating	IP 66 / equivalent to NEMA 4X (not suitable for conduit connection)		
Dimensions (W x H x D)	5.67 x 5.67 x 3.74 in. (144 x 144 x 95 mm) (DIQ/S 182 XT: 5.67 x 5.67 x 5.63 in. / 144 x 144 x 143 mm) / DIQ modules: 3.74 x 3.74 x 2.28 in. (95 x 95 x 58 mm)		
Weight	DIQ 182: approx. 2.2 pounds (1 kg) DIQ/S 182 XT and DIQ/S 182 XT-4: approx. 3.31 pounds (1.5 kg)		
Guaranty	3 years for defects of quality		
Sensors			
Mechanical Connections for Accessories	Connection slot; connection screw thread G 1"		
IQ Sensor Connection Cable	Combined mechanical and electrical connection for rapide attachment and exchange of sensors. Consists of jack plug and pressure-resistant screw connection. Cable lengths: 1.64 – 7.66 – 16.40 yds (1.5 – 7.0 – 15.0 m)/ 21.87 – 54.68 – 109.36 yds (20 – 50 – 100 m) in sea water design available. Storage temperature: -13 °F 149 °F (-25 °C +65 °C) Operating temperature: -4 °F +131 °F (-20 °C +55 °C)		





