











# IQ Sensor Net - the range

SECURE. MODULAR. FLEXIBLE.













### IQ Sensor Net - the System for Wastewater Treatment Plants and more applications

The digital and modular IQ Sensor Net from WTW provides many unique advantages. Since 2001 our customers have enjoyed making the most of the IQ Sensor Net modular design. It enables to easily expand the network with new members. This provides real flexibility and peace of mind that you are completely future proofed for all wastewater monitoring requirements.

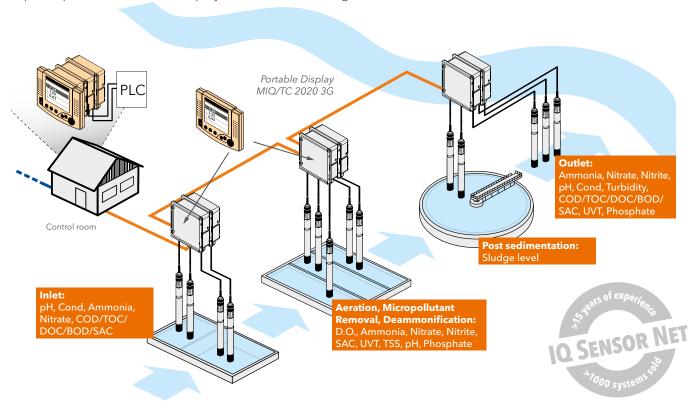
- Integrated overvoltage protection of all components (sensors, modules, cables)
- Reduce cost of installation with universal sensor connection and 2 wired cables rather than multiple power and output cables
- Intuitive design to operate and expand



At the beginning of your planning, make your decision between 3 systems:

## 1) IQ Sensor Network: System 2020 3G

- For up to 20 digital IQ sensors in any order
- Measuring network for large plants, BackUp controller function for higher operational safety
- Ethernet/LAN interface and integrated webserver for easy network connection
- Fast and easy saving of logbook data, measured values and configurations for additional safety and easy and safe software updates via USB stick
- Up to 3 portable and clear display even in direct sun light



# Oxygen measurement with FDO® 700 IQ

- Calibration free sensor
- Reduces energy and operational costs
- Long lifetime of membrane cap
- Precise results without drift

# Ammonia & Nitrate measurement with ISE sensors (e.g. VARION® Plus 700 IQ)

- Easy and fast matrix adjustment
- Up to 2.000 mg/l NH<sub>4</sub>
- Extremely robust electrodes
- Compensation with K and Cl

# The wetchemistry revolution is now: Alyza IQ PO<sub>4</sub>

- Minimized reagent consumption and waste
- Extremely low maintenance
- Reliable results also in low measuring ranges

# 2) Outstanding among the Compact: System 282/284

- Multi-channel controller for up to 4 IQ sensors provides easy and lowcost expansion
- Up to 20 parameters can be visualized at the same time
- Includes free-of-charge webserver for full remote control
- Perfectly suited to replace or add single measuring point
- Simple Data transfer and download with USB stick at every controller
- Optional: Ethernet and RS 485 interface for network connection and fieldbus communication

# 3) The Single Parameter Measuring Point: System 181

- Low-cost entrance into the digital measuring technique
- Suitable fixed cable sensors for the parameters pH/ORP, Cond,
   D.O. and Turb
- Stable, robust and reliable measuring technique

# IQ System 284 with 4 connected IQ sensors (6 x mA, 6 x Relays, Ethernet interface for remote control as option) IQ System 181 with FDO® 700 IQ F

### All Parameters at a Glance

Sensors  D2.01 to D2.26  Parameter	TriOxmatic® 700 IQ (F)	FDO® 700/701 IQ (F)	SensoLyt® 700 IQ (F)	TetraCon® 700 IQ (F)	VisoTurb® 700 IQ (F)	ViSolid® 700 IQ	AmmoLyt® 700 IQ	NitraLyt® 700 IQ	VARiON® 700 IQ	NitraVis® 701/705 IQ (TS)	NitraVis® 701/705 IQ NI	CarboVis® 701/705 IQ (TS)	NiCaVis® 705 IQ (TS/SF)	NiCaVis® 701/705 IQ (NI) SF	UV 701/705 IQ SAC	UV 701/705 IQ NOx	IFL 700 IQ	Alyza IQ PO <sub>4</sub>
Usable with System 2020 3G and 282/284																		
Usable with System 181*																		
Parameter																		
Temperature																		
Dissolved Oxygen (electrochemical)																		
Dissolved Oxygen (optical)																		
pH/ORP																		
Conductivity																		
Salinity																		
TDS																		
Turbidity (optical)																		
TSS (optical)																		
Ammonia (ion-selective)																		
Nitrate (ion-selective)																		
Nitrate (optical/spectral)																<b> </b>		
Nitrite (optical/spectral)																		
Potassium (ion-selective)																		
Chloride (ion-selective)																		
COD/BOD/TOC/DOC (optical/spectral)																		
SAC and UVT (optical/spectral)																		
Sludge Level																		
Orthophosphate (optical/wetchemical)																		

Systems in Detail																230 VAC	VAC	
Module  D1.01 to D1.10	MIQ/PS	MIQ/24V	MIQ/C6	MIQ/R6	MIQ/CR3	MIQ/IC2	MIQ/3-MOD	MIQ/3-PR	MIQ/JB	MIQ/JBR	MIQ/WL PS (SET)	MIQ/TC20203G	MIQ/MC3	MIQ/MC3-MOD	MIQ/MC3-PR	Cleaning Air Box - 230	Cleaning Air Box - 115	MIO/CHV PLUS
Usable with System 2020 3G																		
Usable with System 282/284																		
Available IQSN connectors	3	3	2	2	2	2	2	2	4	4	3	X	2	2	2	X	X	2
Module features												, ,				, ,		
Power supply																		
100240 V AC																		
24 V AC/DC																		
Analog outputs/relays																		
6 x 0/420 mA																		
6 x relays																		
3 x 0/420 mA, 3 x relays																		
Analog inputs																		
2 x 0/420 mA																		
Interfaces																		
MODBUS																		
PROFIBUS																		
USB							×	×										
Ethernet/LAN (Profinet, Ethernet/IP, Modbus TCP)																		
Intra-system connectivity																		
4 available IQSN connectors																		
4 available IQSN connectors including signal amplification for large distances																		
Radio transmission																		
Controller																		
Controller/Terminal (with display)																		
Controller in standard IQ module without display																		
Compensation																		
Air-pressure compensation for D.O. measurement																		
Compressed air cleaning																		
Air compressor 230 VAC																		
Air compressor 115 VAC																		
Valve for automatic cleaning																		

 $m{x}$  USB interface only for software updates





