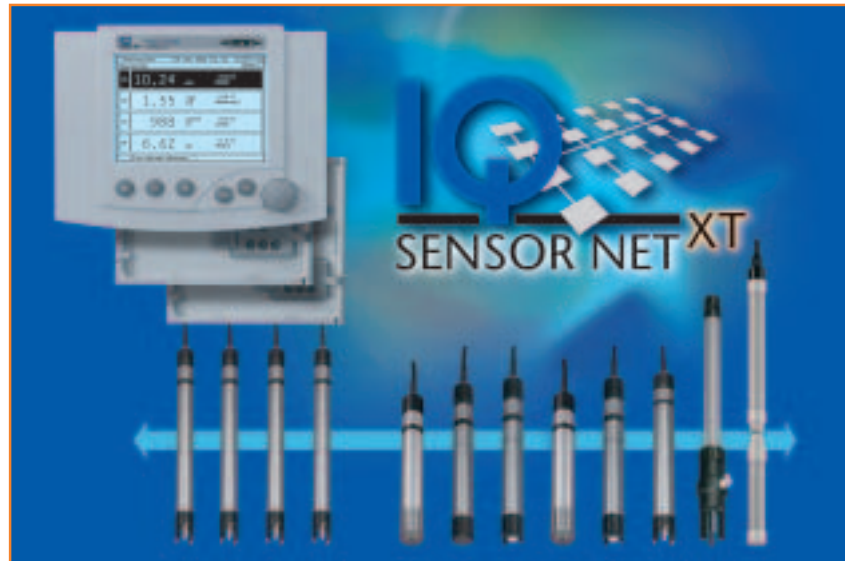A/Z

IQ SENSOR NET

IQ
SENSOR NET

The modular multi-parameter measuring system

- **Universal online measuring system**

- **For any parameter**

- **Upgradable, analog and digital connections**

NEW

System 184 XT now for 12 sensors

New components:
- Redundant controller in terminal
- Modbus connection
- FDT/DTM for PROFIBUS DP
- Power supply:
  More power for larger systems
- Output module with
  6 analog outputs
- Universal Input module
  0/4 - 20 mA

New sensors:
- Ammonium
- Nitrate
- Carbon

The IQ Net is a modular system for precise online measurements:

- pH, ORP, oxygen, temperature, turbidity/TSS, ammonium, nitrate, COD and more
- Single parameter units and multiparameter systems
- Analog outputs and relays, digital interfaces
  (RS 232, RS 485, PROFIBUS DP, Modbus RTU)

With special security features for fail-safe operation, such as:

- Integrated lightning protection (coarse and fine protection)
- Programmable status in case of error
- Automatic power fail restart
- Optional redundant controller for 100% availability
- Software for storing, saving and documenting system configuration

Simple installation using:

- 2-wire-connection technology
- Plug & play connection of any IQ sensor
- Simple system expansion by easily adding modules or sensors
- Install components where needed (e.g. analog signals directly in control room)

IP 66   CE   ETLus cETL   **2** * Year Warranty

* 1 year for sensors

For information visit **www.WTW.com** for a customer care center near you or inside US: call **WTW 800 645 5999**.

A/Z

AmmoLyt® System

Ammonium Measurement directly in the Medium

– without Sample Preparation

- in-situ ammonium sensor

- Control of the aeration process

- Automatic air cleaning

The continuous measuring of O_2 and NH_4 can result in significant savings through:

- energy-optimized operation due to demand-oriented regulation of aerator aggregates,

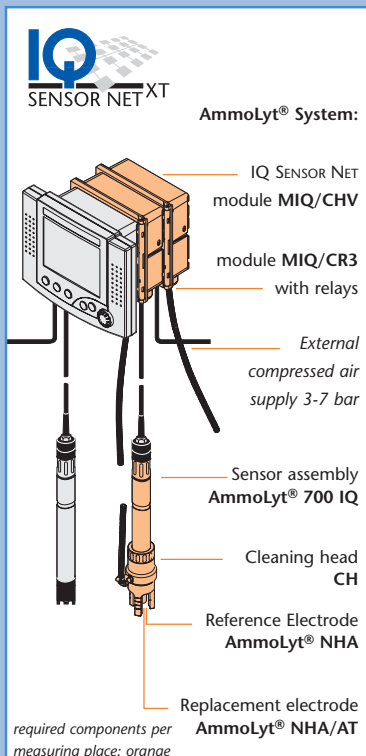- adherence to critical values or reduction of wastewater charges.

The low investment costs for the system can thus be amortized after a short period.

IQ SENSOR NET XT

AmmoLyt® System:

IQ SENSOR NET
module **MIQ/CHV**

module **MIQ/CR3**
with relays

External compressed air supply 3-7 bar

Sensor assembly
AmmoLyt® 700 IQ

Cleaning head
CH

Reference Electrode
AmmoLyt® NHA

Replacement electrode
AmmoLyt® NHA/AT

required components per measuring place: orange

Technical Data

Appropriate Electrode	Reference electrode AmmoLyt® NHA with replacement electrode AmmoLyt® NHA/AT
Measuring Ranges/	NH_4-N: 0.1 ... 1000 mg/l / 1 mg/l; 0.1 ... 100 mg/l / 0.1 mg/l
Resolution	NH_4^+: 0.1 ... 1290 mg/l / 1 mg/l; 0.1 ... 129.0 mg/l / 0.1 mg/l
	mV: -2000 ... +2000 mV/1 mV
Temp. Measurement and Compensation	Integrated NTC thermistor Range: 32 ... 104 °F (0 °C ... +40 °C)
Calibration Procedures	1-point/2-point calibration with standard solution, known addition, double-known addition, in-situ calibration against reference solution
pH range	pH 4 ... pH 8.5
Accuracy	max ±5% (or better) of measuring end range
Working Life	AmmoLyt® NHA: 6 ... 12 months AmmoLyt® NHA/AT: 3 ... 8 months
Dimensions	19.76 x 1.57 in. (502 x 40 mm; L X D), incl. SACIQ sensor connection cable
Weight	Approx. 2.14 lb (970 g, without electrode, without SACIQ sensor connection cable)

Ordering Information

AmmoLyt® System		Order No.
AmmoLyt® 700 IQ	Robust digital armature for ion-selective electrodes (AmmoLyt® NHA/AmmoLyt® NHA/AT; not included in scope of delivery)	107 002
AmmoLyt® NHA	Ammonium reference electrode	107 004
AmmoLyt® NHA/AT	Ammonium replacement electrode	107 006
CH	Cleaning head	900 107
MIQ/CHV	Valve module for automatic compressed air cleaning; accessible by means of an IQ SENSOR NET relay	900 109
	Standard Solutions see brochure "Product Details"	

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General Description of Meters

Monitors

IQ SENSOR NET

Analyzers

Sample Preparation
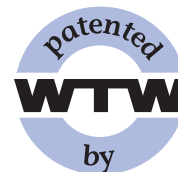
Samplers

Accessories

Measuring stations

IQ Sensor Net

The IQ sensors with digital interface enable:

- large distances in-between sensors and between sensors and measuring system
- signal transmission which is immune to interference
- calibration data are stored in the sensor, calibration can be performed in the laboratory

Stackable modules and digital communication of the IQ system allows:

- analog and digital world combinations
- well laid-out graphic display of measured values
- digital transmission, storage and analysis of measured values

patented

WTW

by

U.S. patent granted
(US 6,655,233 B2)

Systems 184 XT and 2020 XT

Choose the system that's right for your application:

	System 184 XT		System 2020 XT	
Max. number of sensors	12		20	
Output signals	ANALOG:	DIGITAL:	ANALOG:	DIGITAL:
	Analog outputs (0/4 - 20 mA), relays	• via RS 232 – PC software terminal and data server function	Analog outputs (0/4 - 20 mA), relays	• via RS 232 – PC software terminal and data server function • **RS 232 – modem** • **RS 485**
				• **PROFIBUS DP** • **Modbus RTU**
			(digital parallel to analog possible)	
Knowledge of special automation technology required	No		Principally no, in PROFIBUS/Modbus systems yes	
Additional Options				
Additional Displays	Yes		Yes	
Redundant controller	Yes		Yes	
Datalogger	Yes		Yes, enhanced performance	
Modem-capable interface	No		Yes	

System 184 XT

particularly suitable for conventional facilities, in which the user wishes to combine the advantages of digital sensor technology with the simplicity of conventional instrumentation. Signal relaying is generally performed by means of 0/4-20 mA analog outputs and relays.

System 2020 XT

is the system of choice for a large number sensors, for digital interfaces and as futureproof instrumentation, if for example a PROFIBUS control is planned in an upcoming extension phase.

As a PROFIBUS subsystem, System 2020 XT also has considerable advantages over instruments equipped directly with PROFIBUS interface:
- Direct connection to PLC via PROFIBUS DP, but with the ease of use of Profibus PA (2-wire technology, any bus topology, configuration and parameterization per FDT/DTM) and including power supply for sensors with high power demand and cleaning devices
- No specialized personnel required for replacement of sensors or other components
- Sensor calibration in the laboratory and on-site connection of pre-calibrated sensor possible
- For particularly critical applications, parallel installation of analog outputs and relays in addition to digital signal transmission is possible, in order to implement prescribed safety strategies in the case of control system failure.

For information visit **www.WTW.com** for a customer care center near you or inside US: call **WTW 800 645 5999**.

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