



Online Monitoring for



Potable Water

Disinfectants
pH
Redox Potential (ORP)
Turbidity

Organics Monitoring - SAC₂₅₄
Ammonium/Nitrate
Specific Conductivity
Dissolved Oxygen

Disinfectants

AMI Codes-II



Photometric measurement and control system for disinfectant concentrations

- Conforming with standard DPD-method according to AWWA 4500-Cl G/ EN ISO 7393-2 for free chlorine
- High accuracy and reproducibility due to automatic zero-value calibration
- Reduced maintenance with cleaning module and high tolerance against fouling

- ▶ **Free Chlorine**
0-5 ppm
- ▶ **Chlorine Dioxide**
0-6 ppm
- ▶ **Ozone**
0-2 ppm

AMI Codes-II CC



Differentiated photometric determination of chlorine according to AWWA 4500-Cl G / EN ISO 7393-2

- Continuous and simultaneous analysis of free, bound and total chlorine
- Freely adjustable measuring intervals for optimized use of reagents
- Fast and easy to use verification with user-friendly solid state standard

- ▶ **Free Chlorine**
0-5 ppm
- ▶ **Bound Chlorine**
0-5 ppm
- ▶ **Total Chlorine**
0-6 ppm

AMI Trides



Amperometric measurement and control system for disinfectant concentrations

- Reagent-free – low operating costs with durable, membrane-free sensor design
- Low maintenance, high zero point stability, improved longevity with automatic sensor cleaning
- Reliable measurements with integrated monitoring of Redox Potential or pH Value (incl. compensation)

- ▶ **Free Chlorine**
0-5 ppm
- ▶ **Chlorine Dioxide**
0-3 ppm
- ▶ **Ozone**
0-1 ppm

pH Redox Potential

AMI pH/Redox



Potentiometric measurement of pH value and/or redox potential (single or dual channel)

- Easy calibration without sensor disassembling
- Minimized maintenance with integrated sensor cleaning
- Integrated temperature measurement and compensation

- ▶ **pH Range**
1-13 pH
- ▶ **Redox Potential (ORP)**
-400 bis +1200 mV

Turbidity



Contact-free turbidity measurement; approved alternative method to US EPA 180.1 / ISO 7027

- Heated optics prevent measurement errors and fouling from condensation
- No consumables, no wearing parts, no follow-up costs
- Automatic measuring chamber flushing; trouble-free operation without manual intervention
- Fast and easy verification with primary and secondary standard

▶ **Turbidity**
0-200 NTU

AMI Turbitrack



ISO 7027 compliant determination of turbidity under process pressure conditions

- Sample intake up to 10 bar; no pressure reduction necessary
- Minimized maintenance because of wiper-free operation
- Fast and easy to use verification with primary and secondary standard

▶ **Turbidity**
0-100 NTU

Organics



Measurement of UV absorption at 254nm (SAC₂₅₄) for monitoring of organic contamination

- Dynamic measuring method: Insensitive to fouling with wide measuring range
- Integrated grab sample function
- Correlation with DOC, TOC and other related parameters possible
- Integrated turbidity correction at 550 nm per DIN 38404-3

▶ **UV Absorption**
UVA 0-300 m⁻¹
▶ **UV Transmission**
0-100 %
▶ **DOC, TOC**
Concentration ppm

Ammonium Nitrate



Ion sensitive determination of Ammonium, Nitrate or Fluoride

- Low operating costs due to reagent free operation
- Minimal maintenance due to integrated sensor cleaning
- Flexibility to monitor additional parameters with ion sensitive electrodes

▶ **Ammonium**
0-1000 ppm
▶ **Nitrate**
0-1000 ppm
▶ **Fluoride**
0-1000 ppm

Specific Conductivity

AMI Solicon 4



Measuring of specific conductivity, TDS or salinity

- Insensitive to fouling due to 4-electrodes principle
- Measurement of Salinity as NaCl possible
- Easy calibration without sensor removal
- ▶ **Specific Conductivity**
0,1 $\mu\text{S}/\text{cm}$ -100 mS/cm
- ▶ **Salinity (as NaCl)**
0-4 %
- ▶ **TDS (Coefficient)**
0-20 g/l

Dissolved Oxygen

AMI Oxysafe



Amperometric measurement of dissolved oxygen

- Integrated air pressure and temperature compensations for simple calibration using ambient air
- Long-term stable measuring system with robust electrode for low-priced operation
- Easy to handle membrane and electrolyte exchange
- ▶ **Dissolved Oxygen**
0-20 ppm
- ▶ **Saturation**
0-200 %

Chematest 30/35



Portable kit for disinfectants, cyanuric acid, pH and redox potential measurements. Dust and water protected (IP67), removable cuvette adapter.

- Easy handling, reproducible results due to measurements using liquid reagents (DPD method)
- Menu-driven user guidance; registration of users and sampling points
- Comfortable measurement of pH and redox potential (ORP) with external sensors (Chematest 35 only)
- ▶ **Chlorine (free, total, combined)**
0-10 ppm
- ▶ **Chlorine Dioxide**
0-19 ppm
- ▶ **Ozone**
0-4 ppm
- ▶ **pH Range (with phenol red)**
6.5-8 pH
- ▶ **Cyanuric acid**
0-100 ppm

via sensor connections (CT35 only):

- ▶ **pH range**
1-13 pH
- ▶ **Redox potential (ORP)**
-400 - +1200mV

Other parameters: see datasheet

Swan Monitor Concept



Swan instruments are delivered as fully functional, ready-to-use instruments. This ensures easy system integration as well as user-friendly operation and maintainability.

Highest standards in development and production assure the instrument quality expected by our customers.

System Integration

- Complete panel-mounted systems with fluidics connections preconfigured for quick start up
- Various communication possibilities with Profibus, Modbus, HART-Protocol, USB-interface and analog output
- Simple process engineering with regulation functions (P, PI, PID or PD), relay or analog output

Service and Maintenance

- Uniform menu navigation for simple operation and maintenance - one transmitter for all instruments
- Clearly arranged setup of instruments, easy accessibility of all components for efficient maintenance
- Self-explanatory maintenance procedures can be easily performed by the operating company

Quality Assurance

- Every analyzer is wet bench tested and factory calibrated prior to delivery
- Automatic tracing of reagent charging level and sensor functions by the instrument
- Integrated flow control for validity check



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