

AquaDMS

System for Disinfection Monitoring





Applications

Potentiostatic measurement of one of the following parameters

- Free Chlorine (HClO, hypochloric acid)
- Chlorine Dioxide (CIO2)
- Ozone (O3)
- Hydrogen Peroxide (H2O2)

Properties

- Complete and pre-assembled system:
 Mount connect water measure
- Configurations with/without pH compensation
- Stabilized waterflow
- Automatic sensor cleaning function
- No zero drift
- Direct measurement
- Result is available within seconds

Industries

- Treatment of drinking water
- Beverage production
- Food production
- Process water in various industries











Innovations with tangible benefits

Complete system

A pre-assembled system with the following components depending on the configuration:

- Intelligent control system
- Flow regulator
- Automatic sensor cleaning
- Sensor to measure disinfectant & sensor to measure pH
- Mount connect water measure

Potentiostatic Measurement

With this principle, the sensor is in direct contact with the medium to be measured:

- Measured value available within seconds
- No membranes
- No electrolyte to be refilled

Flow regulator

Stable water flow is most critical for the potentiostatic measurement of disinfectants. The flow regulator guarantees:

- Minimum needed flow stability
- Precise measurement during long periods of time

Maintenance

All sensors are equipped with the automatic sensor cleaning function ASR®. The cleaning interval can be chosen freely and is at least 24 hours:

- No manual cleaning is necessary
- No chemical additives are necessary
- Long calibration cycles
- ASR® eliminates coatings of organic and inorganic material (limestone, fat, iron- & manganese oxides, etc).

Intelligent control system

Control unit with touch screen technology and color display.

- Values, alarm- and status messages can be presented

MicroSD-card for data and parameter storage and software update.

Main technical details

Measuring principle: Potentiostatic measurement Measuring span: Free Chlorine: 0 ... 20 mg/l

Chlorine Dioxide: 0 ... 20 mg/l (upon request 0 ... 30 mg/l)

0 ... 10 mg/l Hydrogen Peroxide: 0 ... 30 mg/l Measuring range: Freely program Resolution: 0.01 mg/l Conductivity of sample: minimum 50 µS/cm

6 ... 9 (for free Chlorine 6 ... 8) pH of sample:

IP 65 Protection:

Full details and technical data:





AquaDMS

Technical data

AquaDMS System

Measuring principle: Potentiostatic measurement
Measuring span: Free Chlorine: 0 ... 20 mg/l

Chlorine Dioxide: 0 ... 20 mg/l

(upon request 0 ... 30 mg/l)

Ozone: 0 ... 10 mg/l Hydrogen Peroxide: 0 ... 30 mg/l

Measuring range: Freely programmable except for H2O2, Standard 0 ... 5 mg/l

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Measurment precision: +/- 2 % full scale
Resolution: 0.01 mg/l

 $\begin{array}{lll} \mbox{Sample temperature:} & 0 \ ^{\circ}\mbox{C} \ ... + 50 \ ^{\circ}\mbox{C} \\ \mbox{Maximum pressure:} & 6 \ \mbox{bar} \ @ \ 20 \ ^{\circ}\mbox{C} \\ \mbox{Conductivity of sample:} & \mbox{minimum} \ 50 \ \mu\mbox{S/cm} \end{array}$

pH of sample: 6 ... 9 (for free Chlorine 6 ... 8)

Ambient temperature: 0 °C ... +50 °C
Ambient humidity: 0 ... 90 % rel. @ 40 °C

Protection: IP 65

Supply voltage: 85-265 VAC, 50-60 Hz

Power consumption maximum: 10 VA

Water connection: Outside Ø 8 mm,

Sample flow 35 ... 400 l/hour

	Single measuring system	Multi measuring system
Outputs	1x 0/4 20mA 1x relays, 250V, 6A	5x 0/4 20mA 8x relays, 250V, 2A
Inputs	1x digital (NO/NC)	6x digital (NO/NC)
Digital interface	Micro SD-card	Micro SD-card



Wall mounting plate: PVC Fittings: PVC, PMMA

Control units: ABS

Sensors: Glass, Gold, Platinum, Graphite





