

AquaDMS

System for Disinfection Monitoring



Applications

Potentiostatic measurement of one of the following parameters

- Free Chlorine (HClO, hypochloric acid)
- Chlorine Dioxide (ClO₂)
- Ozone (O₃)
- Hydrogen Peroxide (H₂O₂)

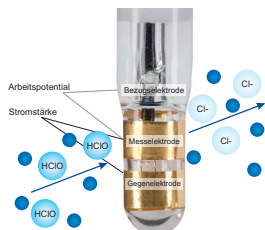
Properties

- 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)
Ozone:	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
pH of sample:	6 ... 9 (for free Chlorine 6 ... 8)
Protection:	IP 65

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 H ₂ O ₂ , Standard 0 ... 5 mg/l
Measurement precision:	+/- 2 % full scale
Resolution:	0.01 mg/l
Sample temperature:	0 °C ... +50 °C
Maximum pressure:	6 bar @ 20 °C
Conductivity of sample:	minimum 50 µS/cm
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

Materials

Wall mounting plate:	PVC
Fittings:	PVC, PMMA
Control units:	ABS
Sensors:	Glass, Gold, Platinum, Graphite

