

# Digital chlorine dioxide sensor Memosens CCS50D

## Memosens sensor for water, process water and utilities in all industries



More information and current pricing:

[www.ca.endress.com/CCS50D](http://www.ca.endress.com/CCS50D)

### Benefits:

- The right sensor version for every application: From trace measurement up to chlorine dioxide concentrations of 200 mg/l.
- Fast response time provides accurate process view and enables prompt reaction to process changes as well as efficient process control.
- Increased process safety: precise and long-term stable measurement ensures consistent process monitoring and allows for lowest disinfectant concentration.
- Flexible installation: sensor can be installed in the CCA151 and CCA250 flow assemblies or in immersion assemblies. Measurement virtually flow independent at flow velocities above 5 l/h (CCA151), 30 l/h (CCA250) or above 15 cm/s (immersion).
- More process up-time thanks to fast sensor exchange: precalibrate the sensor in your lab and then swap it into your process with plug & play.
- Connection to the Liquiline multiparameter transmitter allows easy combination with other relevant parameters of liquid analysis.

### Specs at a glance

- **Measurement range** Trace: 0 to 5 mg/l ClO<sub>2</sub> Standard: 0 to 20 mg/l ClO<sub>2</sub> High: 0 to 200 mg/l ClO<sub>2</sub>
- **Process temperature** 0 to 55 °C, non-freezing (32 to 130 °F)
- **Process pressure** Max. 2 bar abs (Max. 29 psi abs)

**Field of application:** Memosens CCS50D is a robust, low maintenance sensor for chlorine dioxide measurement. It provides stable and fast measured values in drinking water, process water and utilities. The sensor can be used to ensure efficient disinfection for highest water quality and safety, to avoid overdosing of chlorine dioxide or to ensure the absence of ClO<sub>2</sub> in beverage plants and reverse osmosis. Thanks to

Memosens digital technology, CCS50D combines maximum process and data integrity with simple operation.

## Features and specifications

### Disinfection

#### Measuring principle

Chlorine dioxide

#### Application

Adequate disinfection in drinking water, preventing of pathogen formation in cooling water systems, water used to wash pre-packaged vegetables, ensures the absence of chlorine dioxide in beverage systems

#### Characteristic

Amperometric measurement of dissolved chlorine dioxide

#### Measurement range

Trace: 0 to 5 mg/l ClO<sub>2</sub>

Standard: 0 to 20 mg/l ClO<sub>2</sub>

High: 0 to 200 mg/l ClO<sub>2</sub>

#### Measuring principle

Closed, membrane covered measuring cell

Reduction of chlordioxide (ClO<sub>2</sub>) to chloride at the cathode with appr. 120mV

#### Design

Closed amperometric 2-electrode measuring cell with PVDF membrane

#### Material

Sensor shaft: POM

Membrane: PVDF

Membrane cap: PVDF

#### Dimension

Diameter: 25 mm (0.98 inch)

Length: 161 mm (6.34 inch)

## Disinfection

### Process temperature

0 to 55 °C , non-freezing  
(32 to 130 °F)

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### Process pressure

Max. 2 bar abs  
(Max. 29 psi abs)

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### Temperature sensor

10k NTC integrated (Memosens)

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### Connection

Inductive, digital connection head with Memosens

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