

# Analog chlorine dioxide sensor CCS50

## Sensor for water, process water and utilities in all industries



More information and current pricing:

[www.us.endress.com/CCS50](http://www.us.endress.com/CCS50)

### Benefits:

- Fast response time ( $t_{90} < 15$  s) provides an 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 individually adapted disinfectant dosing.
- 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).
- The low-maintenance, amperometric sensor reduces the cost of ownership of the measuring point, particularly compared to colorimetric measuring systems.
- Connection to the Liquisys chlorine transmitter ensures continuity for the installed base of analog chlorine dioxide measuring points.

### 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>
- **Process temperature** 0 to 55 °C (32 to 130°F), non-freezing
- **Process pressure** Max.1 bar (max. 14.5 psi)
- **Measuring method** Closed, membrane covered measuring cell  
Reduction of chlor dioxide at the cathode

**Field of application:** CCS50 is a robust, low-maintenance sensor for chlorine dioxide measurement. It provides stable and fast measured values in water, process water and utilities. The sensor ensures efficient disinfection even at minimum water volumes and helps to achieve 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.

CCS50 ensures continuity for the installed base of analog chlorine dioxide measuring points.

## Features and specifications

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### Disinfection

#### Measuring principle

Chlorine dioxide

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#### Application

Guarantees reliable disinfection in drinking water  
Prevents the growth of biofilms and pathogens in cooling water  
Ensures food quality  
Ensures the absence or presence of chlorine dioxide in Utilities

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#### Characteristic

Amperometric measurement of dissolved chlorine dioxide

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#### Measurement range

Trace: 0 to 5 mg/l ClO<sub>2</sub>  
Standard: 0 to 20 mg/l ClO<sub>2</sub>

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#### Measuring method

Closed, membrane covered measuring cell  
Reduction of chlor dioxide at the cathode

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#### Design

Closed amperometric 2-electrode measuring cell with PVDF membrane

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#### Material

Sensor shaft: POM  
Membrane: PVDF  
Membrane cap: PVDF  
Sealing ring: FKM

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#### Dimension

Diameter: 25 mm (0.98 inch)  
Length: 126 mm (4.96 inch)

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## Disinfection

### Process temperature

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

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### Process pressure

Max.1 bar (max. 14.5 psi)

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### Temperature sensor

10k NTC

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### Connection

Analog with fixed cable

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