

# Suspended solids sensor Turbimax CUS51D

## Memosens sensor for suspended solids and turbidity measurement in water, wastewater and utilities



### Benefits:

- One sensor for all applications: The 'one for all' principle optimizes stockholding, speeds up project handling and simplifies life cycle management.
- Optimum adaption to all measuring tasks: Sensor fits all measuring ranges thanks to numerous integrated analytical models.
- Fast and easy commissioning: Sensor comes precalibrated and preconfigured ex factory.
- Enables unattended plant operation: Intelligent design enables sophisticated self-cleaning capabilities and minimizes maintenance.
- Perfect process adaption: Fast sensor positioning with holder and assembly system Flexdip CYA112 and CYH112.

More information and current pricing:

[www.ca.endress.com/CUS51D](http://www.ca.endress.com/CUS51D)

### Specs at a glance

- **Measurement range** For formazin: 0 to 4000 FNU Display range up to 9999 FNU For sludge: 0 to 300 g/L The achievable measuring range depends very much on the media
- **Process temperature** Process temperature: -5 to 50 °C (23 to 122 °F) Ambient temperature: -20 to 60 °C (-4 to 140 °F)

**Field of application:** Turbimax CUS51D is a smart sensor that allows unattended operation in a wide range of process conditions. Its unique design is extremely robust and it is also low-maintenance thanks to its self-cleaning functionality. Choose from different integrated analytical models to adapt the sensor to your specific application. With Memosens digital technology, the CUS51D combines maximum process and data

integrity with simple operation. It resists corrosion and moisture and enables lab calibration.

## Features and specifications

### Turbidity

**Measuring principle**

Four beam alternating light

**Application**

Wastewater, process water and primary water treatment applications. Turbidity and suspended solids measurement at all stages of the wastewater treatment process and at primary water treatment applications with medium to high turbidities.

**Installation**

In situ (immersion in process or retractable holder), extractive with sample and flow cell

**Measurement range**

For formazin: 0 to 4000 FNU

Display range up to 9999 FNU

For sludge: 0 to 300 g/L

The achievable measuring range depends very much on the media

**Measuring principle**

Scattered light in 90°/135° and 4beam cross light

**Design**

40 mm sensor, stainless steel

**Material**

Stainless steel 316L

**Dimension**

194 mm x 40 mm

## Turbidity

### Process temperature

Process temperature:

-5 to 50 °C (23 to 122 °F)

Ambient temperature:

-20 to 60 °C (-4 to 140 °F)

---

### Connection

G1, NPT3/4"

---

### Ingres protection

IP68 (1 m / 3.3 ft) water column with 1N KCl during 60 days

---

More information [www.ca.endress.com/CUS51D](http://www.ca.endress.com/CUS51D)