

## COD Measurement in Water: Efficient, Reagent-Free Process Management

UVT measurement of Chemical Oxygen Demand (COD) offers a fast, responsive, and cost-effective method for managing water treatment processes.

Utilizing ultraviolet transmittance (UVT) technology, this approach eliminates the need for reagents, streamlining monitoring and reducing costs. It provides real-time insights into organic load, enabling prompt adjustments to treatment processes and ensuring optimal performance.



## Applications



### Drinking Water

- Source water monitoring and alerts



### Waste Water

- Final effluent COD monitoring
- UV disinfection efficiency
- Inlet water quality monitoring
- Aeration control and optimization

## Benefits

### Fast, Accurate Results

- No moving parts, ensuring minimal upkeep
- Long-lasting light source
- Intuitive calibration and setup
- Automated measurements, eliminating the need for grab samples

### Operational Efficiencies

- Optimizes chemical dosing
- Eliminates reagent costs
- No recurring operational expenses
- Automates manual processes
- Rapid response to water changes

### Easy Installation & Placement

- Intuitive, modern, and easy-to-use interface
- Lightweight and portable device
- Suitable for use by anyone without specialized training

### Compliance

- Provides more data for enhanced compliance

<b>Measurements</b>	COD/UVT/UVA/IRA/IRT
<b>Range</b>	0-2800 mg/L COD
<b>Accuracy</b>	±0.5%
<b>Repeatability</b>	±0.05%
<b>Path Length</b>	2, 5, 10, 20, or 50 mm
<b>Sampling Time</b>	10 Seconds
<b>Material</b>	Stainless Steel 316
<b>Body</b>	Stainless Steel 316 with cable gland
<b>Wavelength</b>	254 nm
<b>Dimensions</b>	Probe: 39mm diameter Height 150mm + path length

<b>Operating Conditions</b>	10 to 45 °C, max 80% relative humidity (non-condensing)
<b>Storage Conditions</b>	-20 to 60 °C, max 80% relative humidity (non-condensing)
<b>Enclosure Rating</b>	IP68
<b>Interfaces</b>	RS485, MODBUS
<b>Warranty</b>	1 year
<b>Cleaning System</b>	Optional jet wash cleanse unit
<b>Conformity Safety</b>	EN61010
<b>Conformity EMC</b>	EN61326
<b>Cable Length</b>	Standard 6 m (longer available)
<b>Supply Voltage</b>	12 volts—20 volts DC
<b>Warranty</b>	12 Months

\* Routine calibration of surrogate measurements is necessary to adhere to standard procedures, as the water matrix chemistry can vary over time.

SUVA measurements require periodic updates to the probe with current dissolved organic carbon levels from the water.