

**DATASHEET**

# QuickCODultra™

## ONLINE COD (TOD) ANALYZER

Online COD (TOD) water analyzers for every kind of water - including harsh wastewater applications

### Superior Reliability

### Fast And Precise

### Maximize Profits

## Applications

- De-Icing Water
- Water Influent
- Water Effluent

# Quick and precise – QuickCODultra a product you can rely on!

The COD (TOD) procedure from Process Insights is based on the thermal oxidation of the sample at 1,200°C with subsequent detection of the oxygen consumption. This method (ASTM D6238-98) has been widely employed in the field of online monitoring of different highly complex water samples. The advantage of the QuickCODultra analyzer is the complete oxidation of the water

sample at 1,200°C enabling to determine the COD (TOD) parameter without applying any catalysts or additional hazardous chemical substances. Optional sum parameters, such as TOC and  $TN_b$ , can be detected. The measurement results are free of chloride interference due to the unique process management.

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## *Applications*

Due to an unrivaled automated injection and oxidation technique, the QuickCODultra easily handles sticky, fatty, salty, and high-particle samples even with frequently changing sample matrices.

- Discharge control
- Industrial waste water
- De-icing water
- Water influent
- Water effluent
- Process water

## *Features*

With our QuickCODultra analyzer the real, direct oxygen consumption is measured during the oxidation process of organic and inorganic compounds at 1,200°C. Applying such a high temperature the analyzer operates without any catalysts and additional chemicals.

- High temperature oxidation at 1,200°C
- Catalyst-free technique
- No additional chemicals
- Batch principle
- Up to 6 sample streams
- Robotic injection system
- High salt concentration (up to 600g/l)

## *Benefits*

The measurement of the COD (TOD) takes place in less than 2 minutes. This speed guarantees that very short peaks can be determined very well during a daily cycle.

- Reliable sample analysis with high reproducibility
- Clean measurements without reagents
- Low operating costs
- Fast process control possible

## Technical data

### Measurement technique and sample preparation

Measurement method	Thermal oxidation at 1,200°C
Measurement compliance	According to ASTM D6238 (TOD analysis)
Measurement ranges (ppm)	150 - 30,000 or 20,000 - 250,000 COD (TOD) with optional dilution up to 1,000,000 possible
Parameter	COD (TOD) combination with TOC, TN <sub>b</sub> possible
Oxidation principle	High temperature oxidation (Non-catalytic at 1,200°C)
Accuracy	Max. 2 % of FSR
Repeatability	Max. 2 % of FSR
Cycle time	COD (TOD): 1 - 2 min.
Response time	1 - 2 minutes
Sample preparation	<ul style="list-style-type: none"><li>FlowSampler - maintenance-free particle separator</li><li>Optional homogenizer for the continuous homogenization of samples</li></ul>
Particle size	Particles < 800µm

### Temperature and humidity

Permissible sample temperature	5 - 60°C COD (TOD)
Ambient temperature recommended	10 to 30°C
Ambient air humidity	Max 80 % (non condensing)

### Dimensions and weight

Housing / Explosion protection	Steel, coated with powder paint, IP54; Optional: ATEX / UKEX Zone 2 / T4 IP54 stainless steel housing 5 - 35°C, II 3G Ex dc ec pzc [ib] IIC T4 Gc ATEX / UKEX Zone 1 / IECEx T4 IP54 stainless steel housing 5 - 35°C, Ex db eb pxb [ib] IIC T4 Gb
Design / Dimensions Standard housing	W 848 x H 1,100 x D 635 mm
ATEX-housing	Analyzer: W 1080 x H 1293 x D 700 mm Signal box: W 360 x H 395 x D 170 mm
Weight	From 115 kg (standard)

### Electric and hydraulic specifications

Inflow and outflow	Tube 4.8 mm ID, Tube 8 mm ID, Tube 12 mm ID
Power supply	230 / 115 V~, 50 / 60 Hz
Analogue output	0/4 - 20 mA
Serial interface	RS 232
Protection	16 A external
Option	Remote control via TCP / IP Protocol

## GAIN REAL-TIME INSIGHT INTO YOUR PROCESS

Process Insights delivers premium analytical sensors, analyzers, instrumentation, software and solutions that are mission-critical to keep your operations, personnel, and the environment safe. Our commitment to customer satisfaction is evident through our diverse range of products, programs, and services, designed to accommodate various budgets and application needs.

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## CENTERS OF EXCELLENCE | PROVIDING PROVEN SOLUTIONS

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