

# UNIPHOS ONLINE COD ANALYZER



## Features

- COD analysis by direct method, which involves oxidation of sample by potassium dichromate and Measurement by Absorption
- Ten times reduction in chemicals and cost per analysis as compared to traditional method
- A fully automated system with a industry accredited Program Logic controller ( PLC ) and Human Machine Interface (HMI)
- Built in diagnostic features for reagent level alarm and the component malfunctions
- Data communication compatible with required SPCB/CPCB norms



## Applications

- Municipal water
- Industrial process water
- Waste Effluent/influent
- Ground /Surface water



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*Due to continuing development we reserve the right to change specifications without prior notice.*

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### Manufactured By:

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Chemical Oxygen Demand (COD) is one of the important quality parameters of effluent and source water. It measures the amount of oxygen required to oxidize all the organic matter present in the water. This direct method measures COD using a strong oxidiser to oxidise all the organics in acidic medium and find out the equivalent amount of oxygen consumed.

Uniphos COD analyzer uses potassium dichromate as the oxidizing agent. The acidified sample is first purged with fresh air, to overcome Chloride interference. The sample is next treated with specified amounts of Potassium dichromate and Silver sulphate catalyst, the mixture is digested at 180° C for 20 minutes. In the digestion process the Cr<sup>6+</sup> in potassium dichromate is reduced to Cr<sup>3+</sup>. The amount of Cr<sup>6+</sup> left is related to the COD of the sample, which is measured by potentiometric titration. In other Model Reduced Cr<sup>3+</sup> is measured by absorption and related to COD.

S P E C I F I C A T I O N S	Measurement Method	Absorption / Potentiometric measurement	
	Measurement Range	0 - 500 mg/L	50-2000 mg/L
	Resolution	5 mg/L	15 mg/L
	Measurement accuracy	>100 mg/L, ±10% <100 mg/L, ±20 mg/L	>250 mg/L, ± 10% <250 mg/L, ± 40 mg/L
	Digestion Temp.	180 °C for 20 minutes	
	Analysis time	60 minutes	
	Power requirement	230 V AC/ 60 Hz	
	Data communication	RS 485 & 4-20 mA	
	Dimensions (H*L*B)	1200 X 400 X 600 mm	
	Instrument weight	70 Kgs	