

# Online COD BOD TSS TOC Analyzer MS CB 3





# **FEATURES**

- Capable for Real-Time Adsorption Spectrum of Water pollutants using UV 254nm & IR 850nm wavelength
- Self-cleaning by Wiper Brush → No Need of Air Supply For Cleaning
- No reagents → No pollution, More Economical, Environment and Eco Friendly
- Industrial Grade Rugged Construction
- Quick Response → about 2 seconds
- Built-in Datalogging →10000 Records
- Maintenance Record →100 Records
- Easy Installation

## **DESCRIPTION**

MicroSet launched the new generation COD BOD TSS TOC Sensor which is used for environmental protection purpose. Sensor is reagent free, pollution-free, more economic & robust. Due to small size, it is easier for installation for online continuous water quality monitoring. Sensor comes with Automatic compensation for turbidity interference, with automatic cleaning facility. For long-term monitoring it has excellent stability. Thanks to our R&D team for developing robust, trouble-free controller for processing the signals coming from the sensor. The Controller gives output of RS 485 MODBUS for real time data monitoring demands of SPCB & CPCB.



#### PRINCIPLE

MicroSet make COD BOD TSS TOC Analyser model MS CB 3 uses two light sources, one 254nm ultraviolet light and one 850nm infrared light which can automatically compensate the optical path attenuation and turbidity effects thus achieving more stable and reliable measurement values. Many organic substances dissolved in water absorb ultraviolet light. Therefore, the total amount of organic pollutants in water can be measured by measuring the absorption of these organic substances by ultraviolet light at a wavelength of 254nm.

## TECHNICAL SPECIFICATION

Principle : UV IR Spectral Sensor (ISA) with complete Spectrum scanning

Light source : UV & IR

 Measuring Parameter
 : COD, BOD, TSS, TOC

 COD
 : 1500 ppm (mg/L)

 BOD
 : 500 ppm (mg/L)

 TSS
 : 1000 ppm (mg/L)

 TOC
 : 600 ppm (mg/L)

Probe Head material : POM + Stainless Steel

Probe Depth : <5 m
Temperature : 0 to 50°C
Sensor Protection : IP 68

Temperature / Pressure : Automatic Compensation

Accuracy : ± 3%

Display : 3.2 inch graphic LCD display

Resolution : 0.01 ppm (mg/L)

Linearity : 2% FS Zero Drift : < 1% FS

Retransmission Output : Two settable  $0/4\sim20$ mA current, Max. load  $1000\Omega$  can be assigned

to COD BOD TSS & TOC parameter

Communication Output : RS 485 Modbus Built-in Datalogging : 10000 Records Maintenance Record : 100 Records

Relay output : 2 Nos Normally Open contact (3A/250VAC) can be assigned to

COD BOD TSS & TOC parameter

Power Supply : 100 ~ 240VAC, 50 Hz

Power Consumption : 24W Enclosure of Display Unit : IP 66

Mounting of Display Unit : Wall, Pipe & Panel Mounting Overall dimensions of Display Unit :  $144 \times 144 \times 120 \text{ mm}$  (H × W × D)

Interconnect Cable : Standard 10 meters from Sensor to Display Unit (included)



# **APPLICATION**

Water Treatment Plant (WTP)
Effluent Treatment Plant (ETP)
RO Water Plant
Hydroponics
Textile Industry
Beverages / Food Industry

Wastewater Treatment Plant (WWTP) Sewage Treatment Plant (STP) Power Plant Chemical Industry Paper & Pulp Pharma Industry

## **DIMENSIONS**





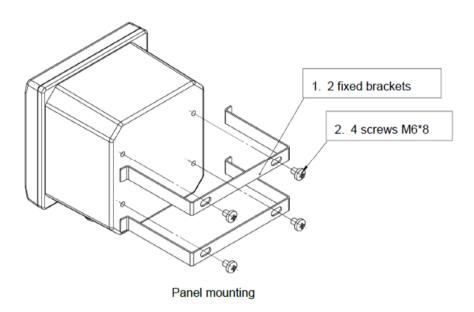
# **SENSOR DIMENSIONS**



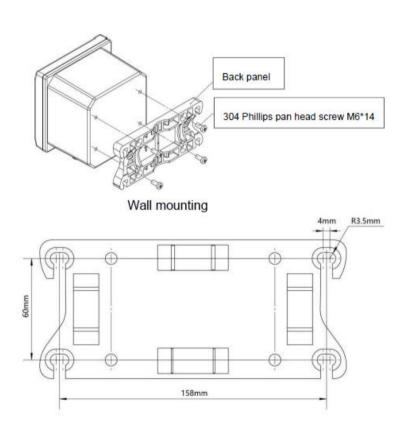


# **INSTALLATION**

# 1. PANEL MOUNTING DETAILS:

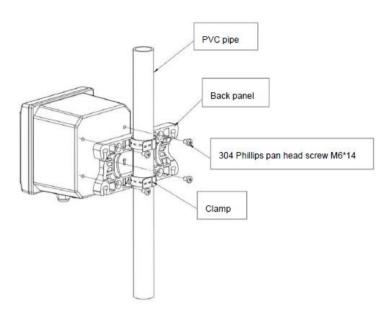


# 2. WALL MOUNTING DETAILS:



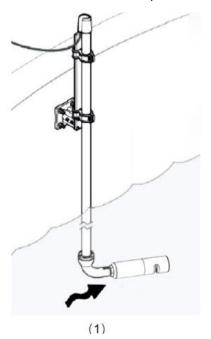


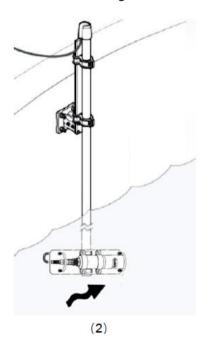
## 3. PIPE MOUNTING DETAILS:



### SENSOR INSTALLATION DIAGRAM

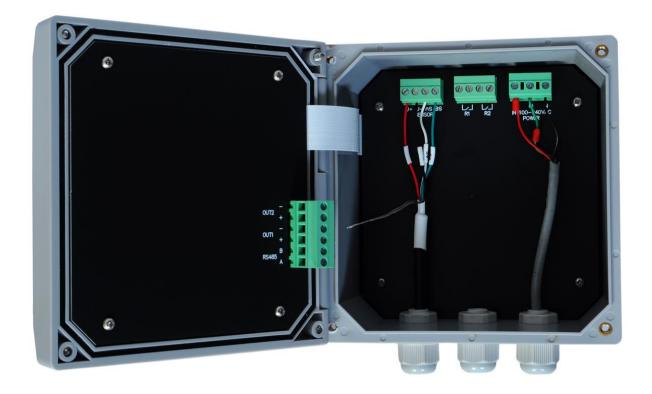
It is recommended to perform fixed installation in the following two ways (1) and (2) in the schematic diagrams; Among them, (1) the hoisting method is elbow type, which is suitable for the environment without rapid flow and water body with less debris; (2) the hoisting method is guard plate hoisting type, which is suitable for rapid flow environment and has high installation stability.







# **TERMINAL DETAILS**



Note: Due to continuous improvement, product specifications & looks may vary