



Recorder



Flow



Pressure



Temp



Analyzer



Level

# Datasheet

## COD Sensor

### SUP-ADS2000

# Supmea<sup>®</sup>

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## Datasheet

### COD Sensor SUP-ADS

Self-cleaning COD sensor is based on the UV absorption principle, does not need reagents, will not cause pollution, more environmental protection; Integrated self-cleaning brush, easy to install and use, even long-term online monitoring still has excellent stability.

#### Parameters

#### Applications

- Domestic sewage
- Plastics industry
- Surface water
- Underground pipe networks
- Food & Pharmaceuticals
- Aquaculture water



#### Features

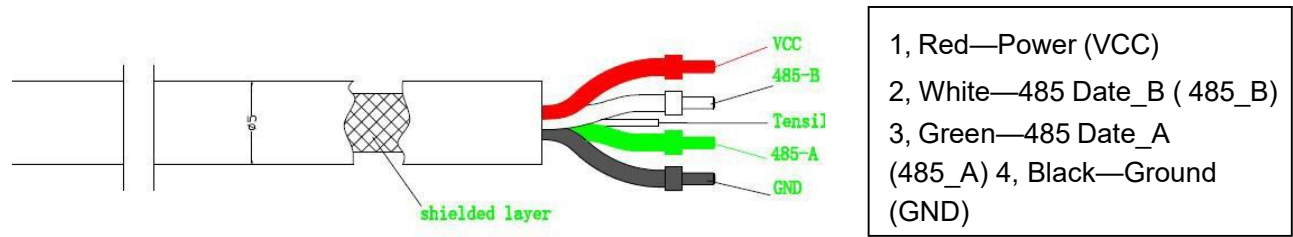
- Digital RS-485 output, Modbus protocol
- Proven UVC LED technology, long lifetime, stable and instant measurement
- Measurement of parameters such as COD, TOC, turbidity and temperature
- With self-cleaning brushes to prevent biological adhesion and longer maintenance intervals

**COD Sensor**

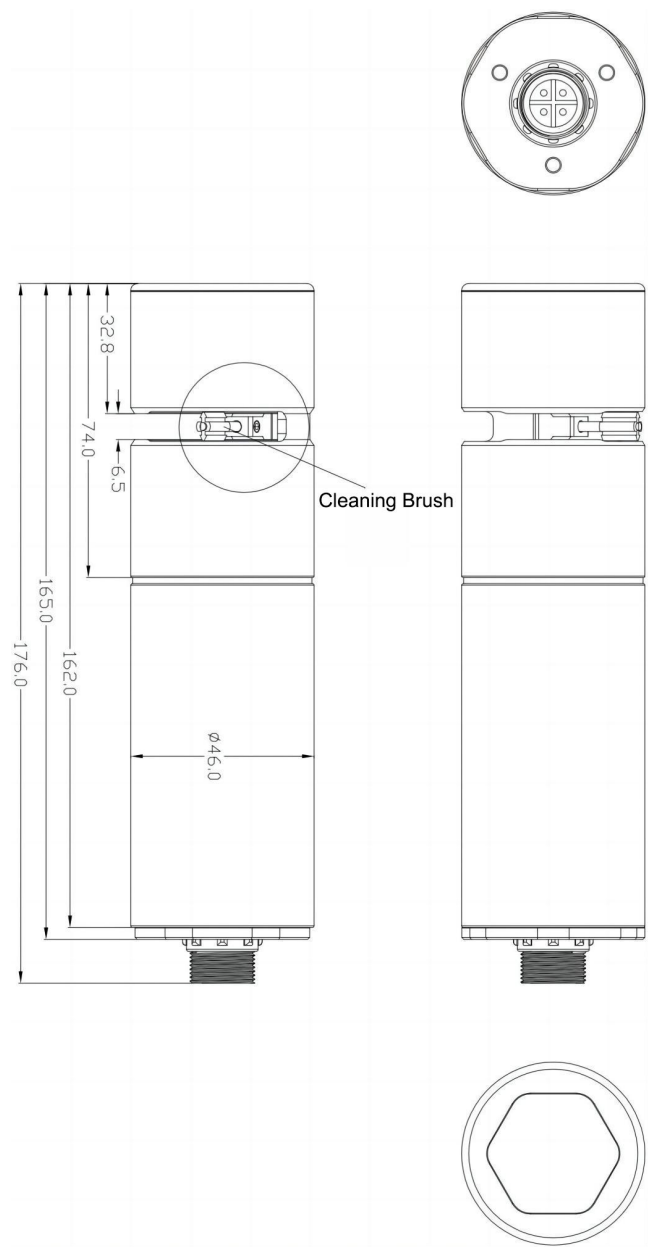
Parameter			
Sensor type	Regular small range	Conventional large range	Economy
Light source	Imported UV 254 nm LED with 550 nm turbidity compensation	Imported UV254 nm LED, 550 nm turbidity compensation	UV 275 nm LED with 550 nm turbidity compensation
Measuring range	(0~500) mg/L equiv.KHP	(0~1500) mg/L equiv.KHP	(0~500) mg/L equiv.KHP
Accuracy	$\pm 5\%$		
Temperature measuring range	(0~50) °C		
Communication output	RS485, Modbus protocol		
Power supply	(12~24)VDC, $\geq 1A$		
Power consumption	No cleaning brush activated: power consumption $\leq 0.25W$		
	Start cleaning brush: power consumption $\leq 1W$ (conventional small range, economic models)		
	power consumption $\leq 1.8W$ (conventional large range)		
Process pressure	$\leq 0.3MPa$		
Sensor size	$\Phi 50mm*179mm$	$\Phi 50mm*179mm$	$\Phi 46mm*176mm$
Cable length	10m (default), customizable		

Wiring

4 wire AWG-24 OR AWG-26 shielding wire. OD=5.5mm



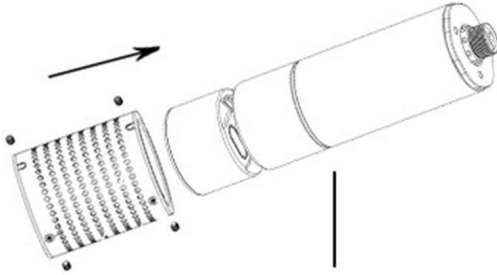
Dimension



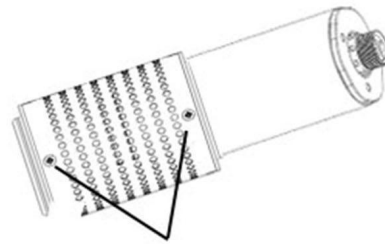
## Installation

### Protective cover installation:

After unpacking of the sensor, install a protective probe cover onto the sensor, as shown in the figure below (4 screws on the cover shall be tightened).



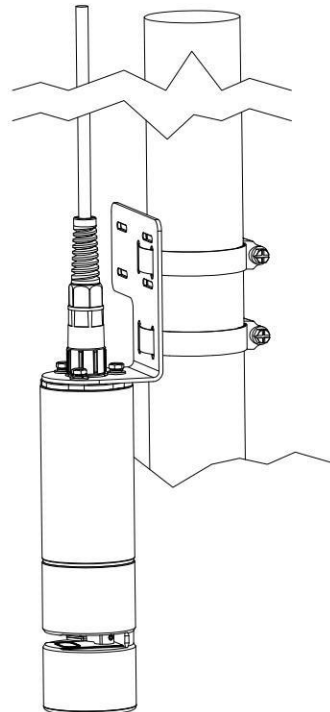
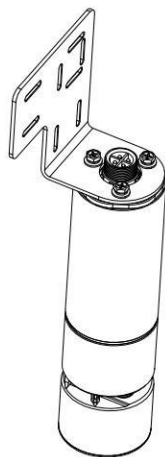
**Loose 4 screws on the protection cover, and then slid the cover on the sensor gap.**



**Tighten the screws to complete installation**

### Fixed installation on site:

It is suggested to carry out a fixed installation in the following two ways as shown in Figure (1) and Figure (2).



Elbow installation in Figure (1) is good for environment with no rapid water flow and less debris.

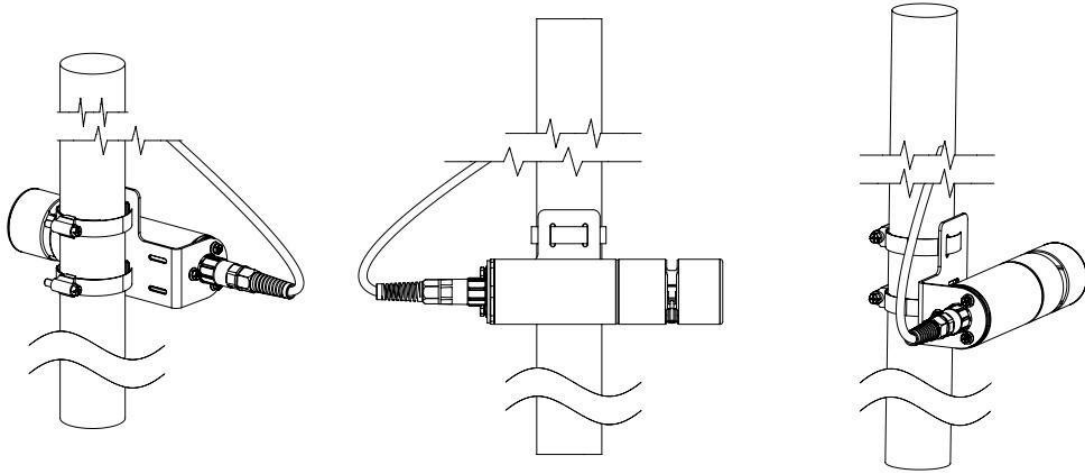


Fig. (2) is an illustration for plate installation, which provide a stable installation in rapid water

Ordering code

SUP-ADS2000										Description
SUP-ADS2000	-	-	-	-	-	-	-	-	-	
Type	A									(0-500) mg/L, Light Source: UV 275nm LED
	B									(0-500) mg/L, Imported Light Source: UV 254nm LED
	C									(0-1500) mg/L, Imported Light Source: UV 254nm LED
Output	A									RS485
Power supply	B									12VDC(12-24VDC)
Cable Length				10						10m
				20						20m
				30						30m
				XX						Other
Housing Material					M3					SS316L
					T1					Titanium(Suitable for seawater)