



Datasheet

COD Sensor

AI-ADS20



Datasheet

COD Sensor AI-ADS20

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

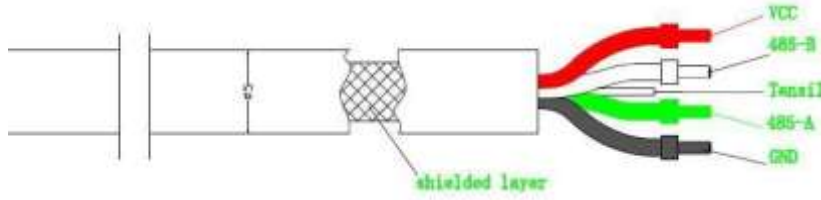
- Digital RS-485 output, Modbus protocol
- Proven UVC LED technology, long lifetime, stable and instant measurement
- Measurement of parameters such as COD, TOC, turbidity and temperature
- With self-cleaning brushes to prevent biological adhesion and longer maintenance intervals

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	±5%		
Temperature measuring range	(0~50) °C		
Communication output	RS485, Modbus protocol		
Power supply	(12~24)VDC, ≥1A		
Power consumption	No cleaning brush activated: power consumption ≤ 0.25W		
	Start cleaning brush: power consumption ≤ 1W (conventional small range, economic models) power consumption ≤1.8W (conventional large range)		
Process pressure	≤0.3MPa		
Sensor size	Φ 50mm*179mm	Φ 50mm*179mm	Φ 46mm*176mm
Cable length	10m (default), customizable		

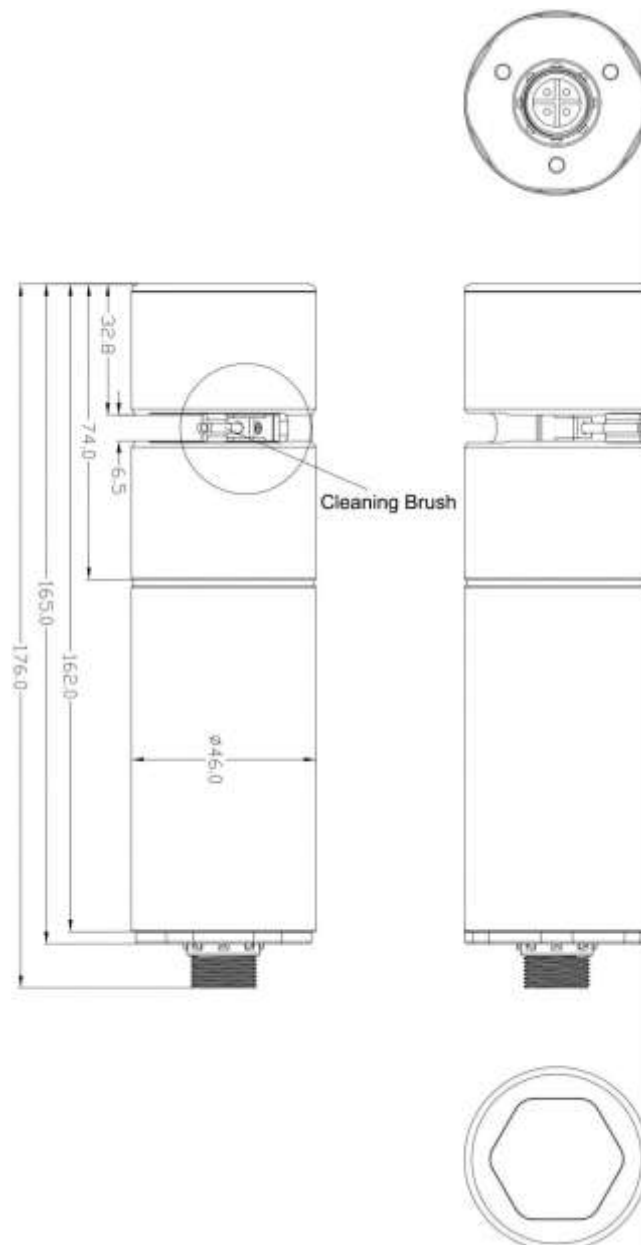
Wiring

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



- | | |
|----------|---------------------|
| 1, Red | —Power (VCC) |
| 2, White | —485 Date_B (485_B) |
| 3, Green | —485 Date_A (485_A) |
| 4, Black | —Ground (GND) |

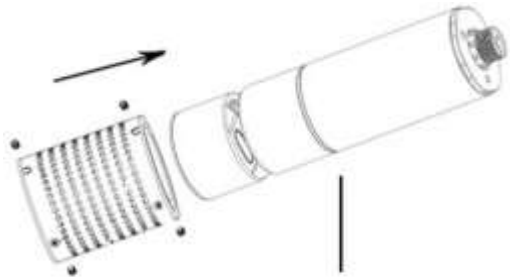
Dimensions



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).



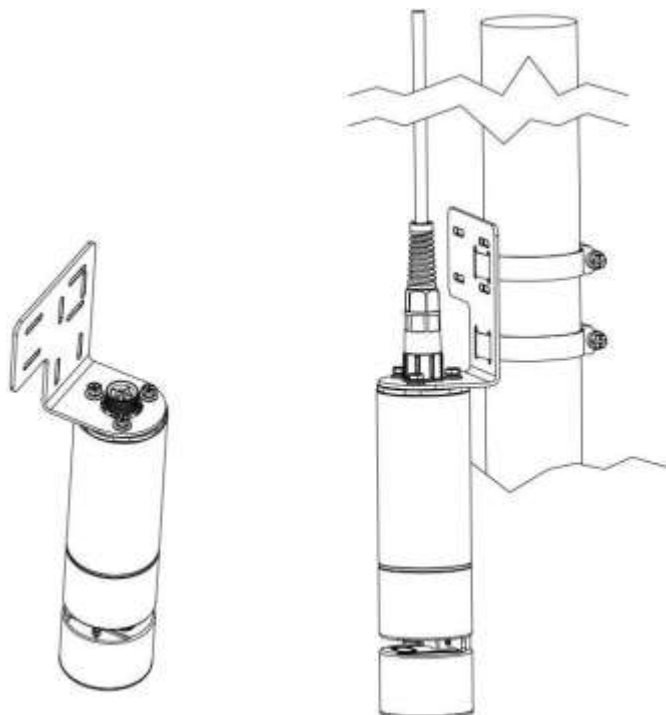
Loose 4 screws on the protection cover, and then slid the cover on the sensor gap.



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.

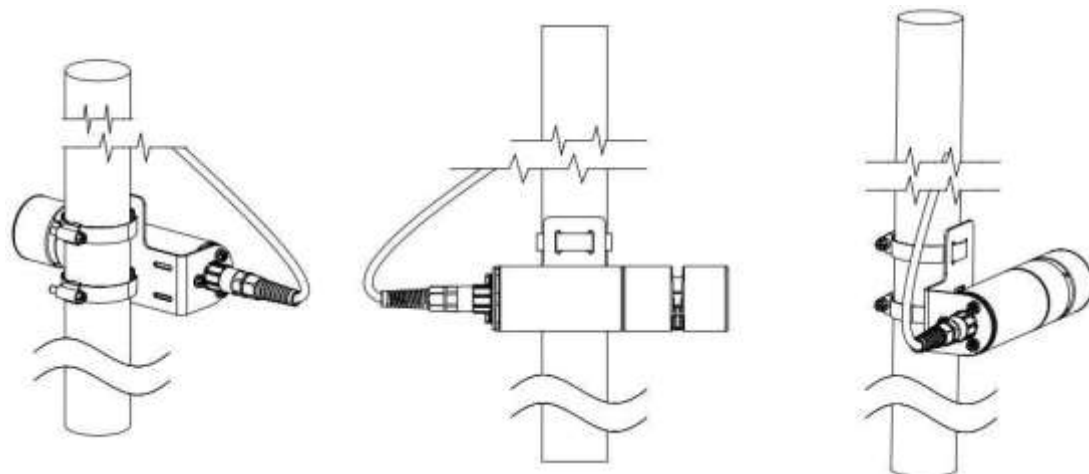


Fig. (2) is an illustration for plate installation, which provide a stable installation in rapid water

Ordering Code

AI-ADS20		Description	
AI-ADS20	- - - - -		
Type	A B C	(0-500) mg/L, Light Source: UV 275nm LED (0-500) mg/L, Imported Light Source: UV 254nm LED (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 T1	SS316L Titanium(Suitable for seawater)

Arka Instruments LLP