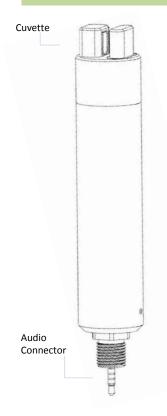






# UV254 correlated parameters 1: COD TOC BOD SS Turbidity



The Broadsensor UV254 sensor is an optical-based absorption and transmittance with UV LED and PD technology sensor. The sensor measures the absorption at 254nm and 550nm at the same time to compensate the SAC measurement for interferences from turbidity and color.

## Key Advantages:

- 2 wavelength absorption measurement: 254nm and 550nm for turbidity and color compensation.
- SAC measurement used to determine organic loading without reagents.
- Measurement directly in the process, no sample processing or reagent required.
- Fast response, minimum 10 second.
- Cold light source (UV LED) and rugged PD, long life time and low drift.
- · Support leakage alarm

#### Note:

- 1, TOC and BOD are calculated from COD, SS and turbidity is from SAC of 550nm.
- 2, The relationship between COD BOC SAC and TOC(from Hach)



Substance groups measured

1.	COD	3.	SAC
2.	BOD	4.	TOC

## Specification



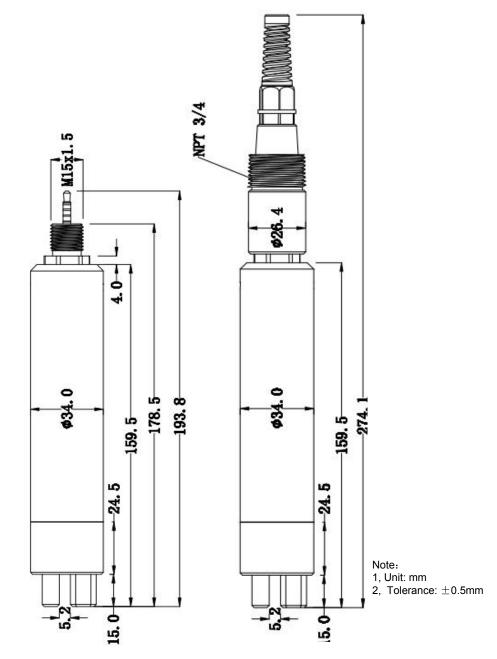
Technical Specifications							
Measurement Method	Absorption measurement at 254 nm, DIN 38402 C2, DIN 38404, HJ/T191 standard						
Range	6mm cuvette gap 0.15~300mg/L equiv. KHP(COD solution)						
Resolution	0.1mg/L or 0.01mg/L COD						
Repeatability	$\pm$ 1% FS equiv. KHP						
Operating temperature	0~45°C						
Storage Temperature	-10~50°C						
Clean system	Auto wiper system(default)						
Warranty	1 year						
Depth	IP68, 10m Max						
Power	5~12V 15mA (normal)						
Output	RS485 and Modbus protocol						
Materials	SS316, POM, quartz glass						
Dimensions	Length 194mm, diameter 34mm						
Flow rate	< 3 m/s						
Response time	Minimum 10s T90						
Field life*	Sensor 3 years or greater						
Recommended Calibration maintain Frequency*	Sensor 3 months						

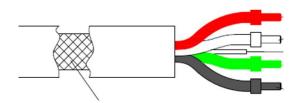
### Note:

<sup>\*</sup>Field life and calibration frequency dependent on site conditions.

# Dimensions Cable information







Red--VCC

White--RS485-B

Bare—Shielding

Green--RS485-A

Black--GND

# Maintenance and ordering information



Sensor	Clean frequency*	Clean frequency	Check inside humidity	Replace O-ring	Calibratio n frequency	Replace consumable part
Optical DO	1-4 days	4-8 weeks	6 months	12-24 months	6 months	24-36 months
Conductivity	4-8 weeks	4-8 weeks	6 months	12-24 months	6 months	No consumable part
Turbidity	0.5-3 days	4-8 weeks	6 months	12-24 months	3 months	No consumable part
Chlorophyll a	0.5-3 days	4-8 weeks	6 months	12-24 months	3 months	No consumable part
BGA	0.5-3 days	4-8 weeks	6 months	12-24 months	3 months	No consumable part
NH4-N	0.5-3 days	4-8 weeks	6 months	12-24 months	2-3 weeks	3-6 months
рH	0.5-3 days	4-8 weeks	6 months	12-24 months	4-8 weeks	6-12 months
UV254 COD	0.5-3 days	4-8 weeks	6 months	12-24 months	3 months	No consumable part
Oil in water	0.5-3 days	4-8 weeks	6 months	12-24 months	3 months	No consumable part
CDOM/fDOM	0.5-3 days	4-8 weeks	6 months	12-24 months	3 months	No consumable part
Wiper	4-8 weeks	4-8 weeks	NA	18 months	NA	18 months***

#### Note:

- 1, \* is without wiper system
- 2, \*\* is with wiper system.
- 3, \*\*\* are dynamic sealing parts
- 4, The O-ring between sensor and wiper is required to replace every 12 months.
- 5, Field life and calibration frequency dependent on site conditions.

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Tel: +86-512-88960831 Fax: +86-512-62988329 Email: sales@broadsensor.com Web: www.broadesnsor.com Order info:

PN: 610812 Max range 300mg/L

PN: 810005-xx PUR cable xx is cable length, unit is meter