

CROSS SMART SENSOR

FA7-CP : Chlorophyll Sensor

Digital technology for optimized measures



FA7-CP Chlorophyll sensor uses fluorescence to measure phycocyanin inside chlorophyll and its derived substances in water. The content of chlorophyll is calculated by the released fluorescence energy when excited by a high-energy LED light source.

FA7-CP sensor emits a LED light beam of 470nm through water; It excites chlorophyll in water to produce fluorescence with a specific wavelength which is then employed to measure the concentration of chlorophyll.

FA7-CP sensor is particularly suitable for scientific research as well as for online water quality monitoring of ground water, surface water and other water applications.

FEATURES AND BENEFITS

- ❖ In-situ monitoring
- ❖ High sensitivity, fast response, stable and reliable
- ❖ Range adjustable, automatic daylight compensation
- ❖ Low power consumption, easy operation and maintenance
- ❖ Digital transmission, anti-interference ability
- ❖ Integrated sensor design, submersible to operate down to 300 meters.
- ❖ Use data in predicting Harmful Algal Blooms
- ❖ Optional Clam-on wiper for automatic self-cleaning



APPLICATIONS:

Lake, reservoir, underground, river and coastal water

In many countries, the presence of cyanobacteria in freshwater bodies used for both drinking water and recreational purposes is under increasing public health attention. Water managers increasingly require methods for monitoring that lead to a minimization of the risks incurred by the users of potentially contaminated sites. One method to monitor the situation is to measure the levels of phycocyanin in chlorophyll. A surveillance protocol based on phycocyanin concentration can significantly improve the accuracy of assessing the extent of cyanobacterial blooms. Such blooms of cyanobacteria in water reservoirs creates severe practical problems for water supplies.

SPECIFICATIONS	
Measuring System	Light Source: LED (470 nm) Detector: Photo diode + filter (685 nm)
Principle	Fluorescence
Measuring Range	0 to 200 ppb Typical
Accuracy	± 3 %
Respond Time	T90 < 10s
Measuring Interval	5 s
Operate Pressure	3 bar, 1 bar in Flow cell 2 to 4 L/min
Operate Temp.	32 to 104 °F (0 to 40 °C)
Power	9 to 36VDC, Max. 1 W
Digital Interface	RS485 Modbus RTU
Housing	Material: 316L, Titanium is Optional
Auto Cleaning	Optional Clamp-on Wiper
Protection Rate	>IP68, submersible
Dimension	Dia. 2" (50.8 mm), Length 9" (229 mm)
Weight	4.6 lbs (2.1 kg) with 30" Cable

ORDER CODE

FA7-CP: Chlorophyll Sensor		
	Measuring Range	
	-1 0 to 200 ppb	Other Range contact factory
	Cable Length	
	-C10 10' (3 m) cable	
	-C20 20' (6 m) cable	Other length contact factory.
FA7-CP	-1	-C30

TERMINALS

<p>GDC-01/02 Terminal Single or dual-channels</p> 	<p>GDC-04/06/08 Controller Multi-channels up to eight</p> 	<p>GDC-Ex Terminal Single channel Ex-proof</p> 
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