JFE Advantech Co., Ltd.

Conductivity and Temperature Logger with Wiper

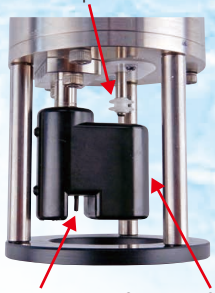
EPSA-CTW

C T

ACTW-WF / WFX, ACTW-WF-L / WFX-L

ACTW-WF / WFX

ACTW-WF-L / WFX-L



Overview

In general, electrical conductivity sensors are highly sensitive to fouling, including biological fouling. Long-term continuous observation typically requires maintenance every 1 to 2 weeks, which can be labor-intensive.

The salinity sensor of the EPSA-CTW employs an in-tube electrode sensor that is completely unaffected by external fouling. Additionally, the in-tube area is automatically cleaned with a piston-type wiper after each measurement, allowing for stable data collection even without maintenance for 2 to 3 months.

The EPSA-CTW has improved cleaning capability by using dual wiper blades.

Sensor Specifications

Parameter	Temperature	Conductivity
Sensor Type	Thermistor	7-Electrode Type
Range	-3 to 45°C	0.5 to 70 mS cm^{-1}*
Resolution	0.001°C	0.001 mS cm^{-1}
Accuracy	±0.01℃ (0 to 35℃)	±0.01 mS cm^{-1}*

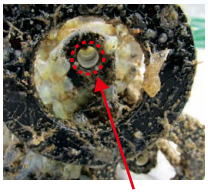
*Calibration is performed using seawater (in the range of 28 to 65 mS/cm). For use in freshwater, please contact us.

Logger Specifications

Model*1	ACTW-WF / WFX	ACTW-WF-L / WFX-L
Memory Type	Built-in Flash Memory	
Memory Capacity	1GB / Approx. 15 million data	
Mode	Continuous Mode / Burst Mode	
Interval	0.1 to 600 sec	
Burst	1 to 1,440 min	
Number of Samples	1 to 18,000	
Battery	AA Alkaline Battery / AA Lithium Battery	
Number of Batteries	6 (Standard type)	12 (Long type)
Communication Method	Wirelss LAN Communication (Compliant with IEEE802. 11n)*2, USB Communication (Compliant with Ver. 2.0, Equivalent to Ver. 1.1), Connector: USB Type-C	
Housing Material	Titanium Grade 2	
Dimensions	ϕ70 mm × 349 mm	ϕ70 mm × 411 mm
Weight	Approx. 1.7 kg in air, 0.9 kg in water	Approx. 2.2 kg in air, 1.2 kg in water
Pressure Resistance	Equivalent to 500 m depth	

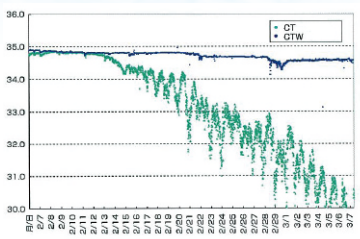
*1 ACTW-WF and ACTW-WF-L are models having wireless LAN communication.
ACTW-WFX and ACTW-WFX-L are models not having wireless LAN communication.
*2 As of January 2025, wireless communication is available in the United States and Canada.

Wiper Effect Example



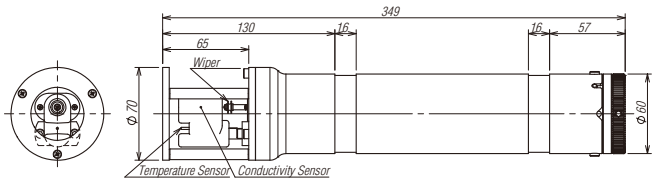
Removal of Biofouling in the Inner Tube

Observation Result Example

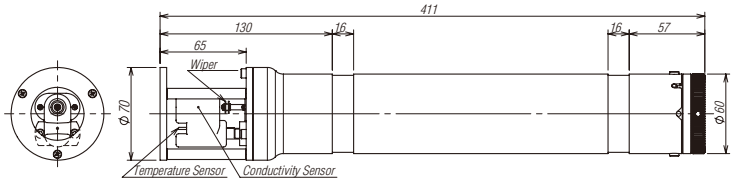


Drawing

ACTW-WF / WFX



ACTW-WF-L / WFX-L



E-mail: ocean-overseas@jfe-advantech.co.jp