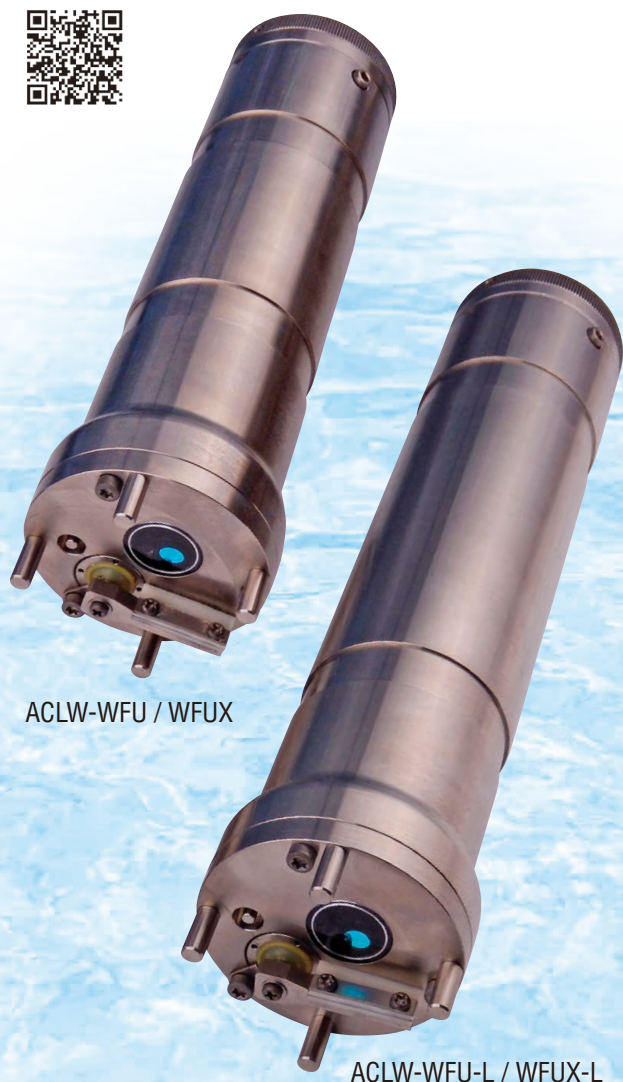


Chlorophyll and Turbidity Logger with Wiper

EPSA-CLW

ACLW-WFU / WFUX, ACLW-WFU-L / WFUX-L

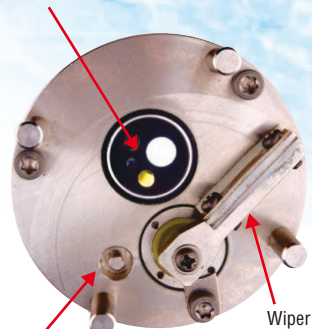
T CHL TBD



ACLW-WFU / WFUX

ACLW-WFU-L / WFUX-L

Chlorophyll and Turbidity Sensor



Temperature Sensor

Wiper

Wiper Effect Example



Overview

The EPSA-CLW is a chlorophyll and turbidity sensor designed for long-term continuous measurements, equipped with a wiper to clean the optical sensor surface from dirt, including biological fouling. The light sources for the chlorophyll and turbidity sensors use highly stable LEDs, resulting in minimal changes over time.

The turbidity sensor, in particular, offers excellent stability in low concentration ranges and high correlation with suspended solids (SS) in high concentration ranges, making it suitable for measurements not only in marine areas but also in dams and rivers.

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

Sensor Specifications

Parameter	Chlorophyll	Turbidity	Temperature
Sensor Type	Fluorescence Measurement	Near-Infrared Backscatter	Thermistor
Range	0 to 400 ppb (Uranine reference)	0 to 1,000 FTU (Formazin reference)	-3 to 45°C
Resolution	0.01 ppb	0.03 FTU	0.001°C
Accuracy	Non-linearity $\pm 1\%$ FS (0 to 200 ppb)	± 0.3 FTU or $\pm 2\%$	$\pm 0.02^\circ\text{C}$ (3 to 31°C)

Logger Specifications

Model ^{*1}	ACLW-WFU / WFUX	ACLW-WFU-L / WFUX-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	Wireless 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	$\phi 70 \text{ mm} \times 240 \text{ mm}$	$\phi 70 \text{ mm} \times 302 \text{ mm}$
Weight	Approx. 1.4 kg in air, 0.8 kg in water	Approx. 1.8 kg in air, 1.0 kg in water
Pressure Resistance	Equivalent to 200 m depth	

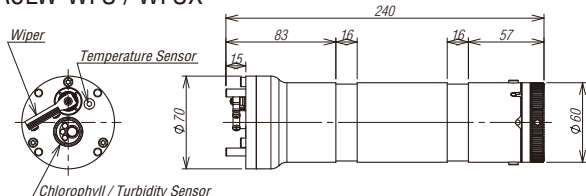
^{*1} ACLW-WFU and ACLW-WFU-L are models having wireless LAN communication.

ACLW-WFUX and ACLW-WFUX-L are models not having wireless LAN communication.

^{*2} As of January 2025, wireless communication is available in the United States and Canada.

Drawing

ACLW-WFU / WFUX



ACLW-WFU-L / WFUX-L

