

# Logger Version Chlorophyll and Turbidity Sensor with Wiper

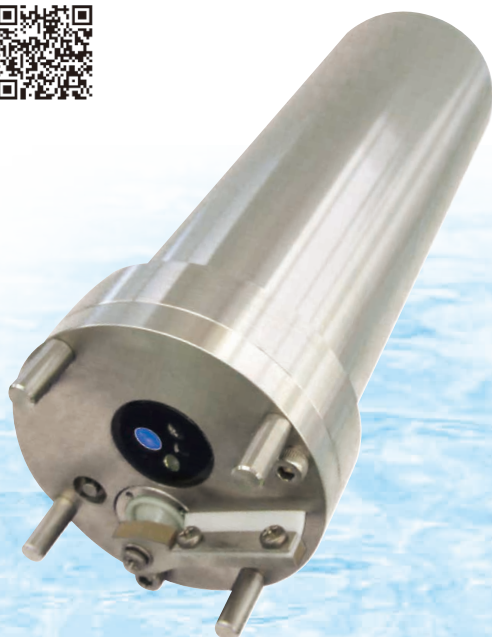
## INFINITY-CLW

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ACLW2-USB



### Overview

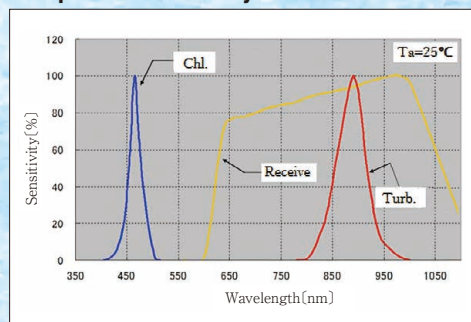
The INFINITY-CLW is a chlorophyll and turbidity sensor designed for long-term continuous observations, equipped with a wiper to clean any contamination on the optical sensor surface. The light sources for the chlorophyll and turbidity sensors use highly stable LEDs, resulting in minimal changes over time.

The turbidity sensor, in particular, offers excellent stability in low concentration ranges and has a high correlation with suspended solids (SS) even in high concentration ranges. This makes it suitable not only for marine environments but also for surveys in dams and rivers.

### Sensor Specifications

Parameter	Chlorophyll	Turbidity	Temperature
Sensor Type	Fluorescence Measurement	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)	$\pm 0.3$ FTU or $\pm 2\%$	$\pm 0.02^\circ\text{C}$ (3 to 31°C)

### Spectral Sensitivity Characteristics



### Wiper Effect Example



### Logger Specifications

Memory Type	microSD card (waterproof high-speed type)
Memory Capacity	1GB
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	CR-V3 Lithium Battery / 3.3 Ah (Up to 4) AA Alkaline Battery (Up to 8) - Requires AA adapter kit AA Lithium Battery (Up to 8) - Requires AA adapter kit
Communication Method	USB communication (compliant with Ver. 2.0, equivalent to Ver. 1.1)
Housing Material	Titanium Grade 2
Dimensions	$\phi 70$ mm $\times$ 232 mm
Weight	Approx. 1.2 kg in air / Approx. 0.6 kg in water
Pressure Resistance	Equivalent to 200 m depth

### Drawing

