

Wide Sensing Range Turbidity Sensor with Wiper







Overview

The INFINITY-Turbi is a logger type turbidity sensor equipped with two turbidity sensors: one for medium concentration measurements and one for high concentration measurements. This allows for accurate measurements across a wide range of turbidity levels, from normal conditions to high turbidity events.

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The device also comes standard with water temperature and depth sensors, making it versatile for various measurement needs. Additionally, the optical sensor section is equipped with a wiper to remove contamination, enabling long-term continuous observations.

Sensor Specifications

Parameter	Medium Concentration Turbidity	High Concentration Turbidity	Pressure	Temperature
Sensor Type	Infrared Backscatter	Infrared Backscatter (Optical Fiber)	Semiconductor Pressure	Thermistor
Range	0 to 1,000 FTU (Formazin reference)	0 to 100,000 ppm (Kaolin reference)	0 to 25 m	-3 to 45°C
Resolution	0.03 FTU	2 ppm	0.001 m	0.001°C
Accuracy	±0.3 FTU or ±2%	±10 ppm or ±5%	Non-linearity ±0.14% FS, Repeatability ±0.2% FS	±0.02°C (3 to 31°C)

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	φ 70 mm × 280 mm		
Weight	Approx. 1.4 kg in air / Approx. 0.7 kg in water		
Pressure Resistance	Equivalent to 25 m depth*		

*By changing the range of the pressure sensor, it can support depths up to 200 m.

