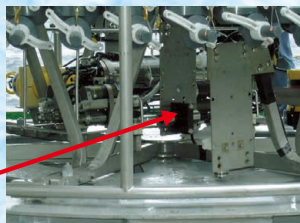


Fast Optical DO Sensor *RINKO I*

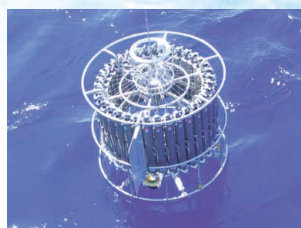


Deep-sea Model
ARO-USB

Sampler with
RINKO I Attached



(Image provided by Dr. Uchida, Japan Agency for Marine-Earth Science and Technology)



Overview

The INFINITY Data Logger Series DO Meter is a model that uses an SD card recording system. Various measurement settings are available, allowing for simultaneous observations when attached to mooring systems, existing water samplers, CTDs, and other equipment. The high-speed response DO sensor enables vertical profiles, which previously took a long time, to be observed in a short period.

Specifications

Model Name	RINKO I	
Model Number	ARO-USB	
Parameter	DO	Temperature
Sensor Type	Optical	Thermistor
Range	0 to 200%	-3 to 45°C
Resolution	0.01% ^{*1}	0.001°C
Accuracy	Non-linearity ±2% FS	±0.02°C (0 to 35°C)
Memory Type	microSD Card (waterproof high-speed type)	
Memory Capacity	1 GB	
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/3.3Ah (Up to 2) AA Alkaline Battery (Up to 4) - Requires AA adapter kit AA Lithium Battery (Up to 4) - Requires AA adapter kit	
Communication Method	USB Communication (Compliant with Ver. 2.0, equivalent to Ver. 1.1)	
Current Consumption	125 mA	
Housing Material	Titanium Alloy (Ti-6Al-4V)	
Dimensions	φ54 mm × 235.5 mm	
Weight	Approx. 0.9 kg in air / Approx. 0.6 kg in water	
Pressure Resistance	Equivalent to 7,000m depth	

*1 Standard value near 100% saturation

Fast Optical DO Sensor *RINKO III*



Underwater connector

The connector in the photo is manufactured by Impulse (current models are manufactured by SubConn).

Overview

This model was developed with the theme of integration into deep-sea multi-bottle water samplers' CTD systems. It operates on a DC 12V power supply and outputs DO and water temperature data as 0 to 5V analog signals. By connecting it to the external input channels of your CTD system, you can utilize it effectively. The high-speed response allows for continuous high-precision profile data to be obtained without imposing restrictions on the operation of the water sampling system.

Specifications

Model Name	RINKO III	
Model Number	ARO-CAV-CM	
Parameter	DO	Temperature
Sensor Type	Optical	Thermistor
Range	0 to 200%	-3 to 45°C
Resolution	0.01% ^{*1}	0.001°C
Accuracy	Non-linearity ±2% FS	±0.02°C (3 to 31°C)
Output	Analog Voltage (0 to 5 V)	
Power Supply	DC 12 V	
Current Consumption	35 mA	
Case Material	Titanium Alloy (Ti-6Al-4 V)	
Dimensions	φ54 mm × 165 mm (excluding connector)	
Weight	Approx. 0.8 kg in air / Approx. 0.5 kg in water	
Pressure Resistance	Equivalent to 6,700 m depth	
Underwater Connector	MCBH8M (SubConn)	

Please prepare the connection cable (signal cable) yourself.

*1 Standard value near 100% saturation

Drawing

