

RINKO-EC - Dissolved Oxygen Eddy Covariance

Fast optical DO sensor for microscale measurements

- Extremely fast response (90%: less than 0.5 s from air to water)
- Eddy covariance measurements of temperature and DO
- Easy DO sensing foil replacement by users
- Easy integration

Aquatic eddy covariance is a powerful technique to measure benthic fluxes. The RINKO series is based on the optical (phosphorescence) principle which is now widely known as a remarkably fast response oxygen sensor with high accuracy. The robust RINKO EC is designed for aquatic eddy covariance measurements. The response time of the sensing foil is less than 0.5 s (90%, from air to water at 25 °C). The foil life-time is more than 200 hours, which allows at least 1 week of continuous measurements of dissolved oxygen. Moreover, the foil can be replaced easily by users. The RINKO EC is an advantageous tool for eddy covariance measurements in many aquatic environments.



Specifications:

Range	DO	Air saturation: 0 to 200% (calibration range: 3 to 30 °C)
	Temperature	-3 to 45 °C (calibration range: 3 to 31 °C)
Accuracy	DO	Air saturation: ±1% (¹)
	Temperature	±0.02 °C
Response Time (90%)	DO	< 0.5 s (from air to water at 25°C)
	Temperature	< 0.5 s (from air to water at 5°C)
DO Sensing Foil Life-Time	200 h continuous operation	
Signal Output	0 – 5 V analogue	
Pre-Heat time	5 s	
Power	9.6 – 24 Vdc (12Vdc recommended)	
Current drain at 12 Vdc (typical)	<20mA	
Housing Material	Titanium (grade 2)	
Weight & Dimensions	0.6 kg (air) / 0.3 kg (water) OD 54mm x 341mm	
Depth Rating	50 m	
Connector	MCBH8MTI or AG306-HP	

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