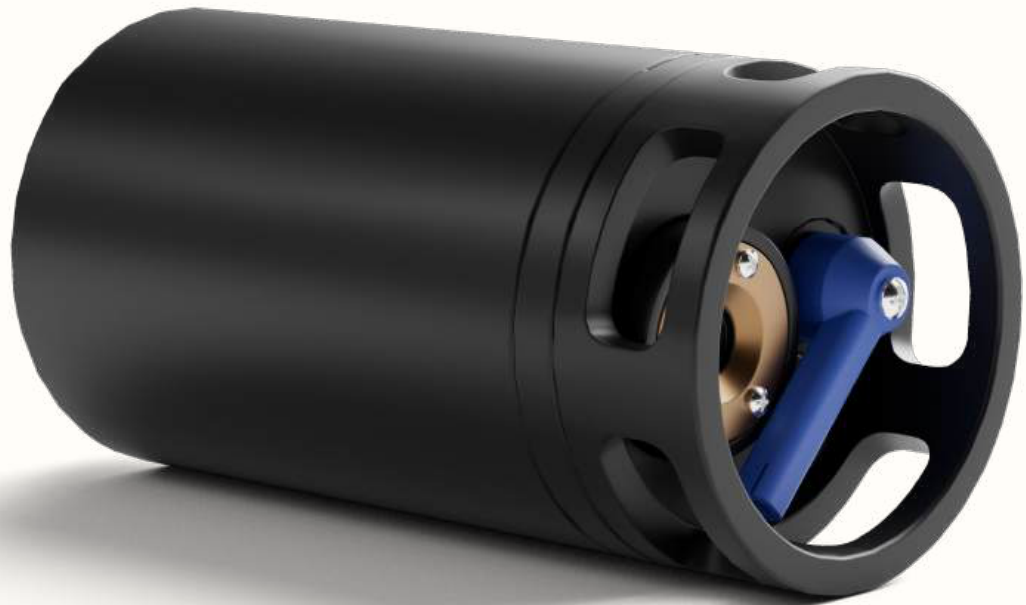


Dissolved Oxygen Sensor • *Actionable Water Quality Measurement*



Monitor dissolved oxygen (DO) concentration and saturation in real time with a compact, long-dwell DO sensor. An integrated anti-fouling wiper and ultra-low power solar-rechargeable battery enables extended deployments and continuous access to water quality insights.

HIGH-IMPACT USE CASES

Marine Research & Conservation

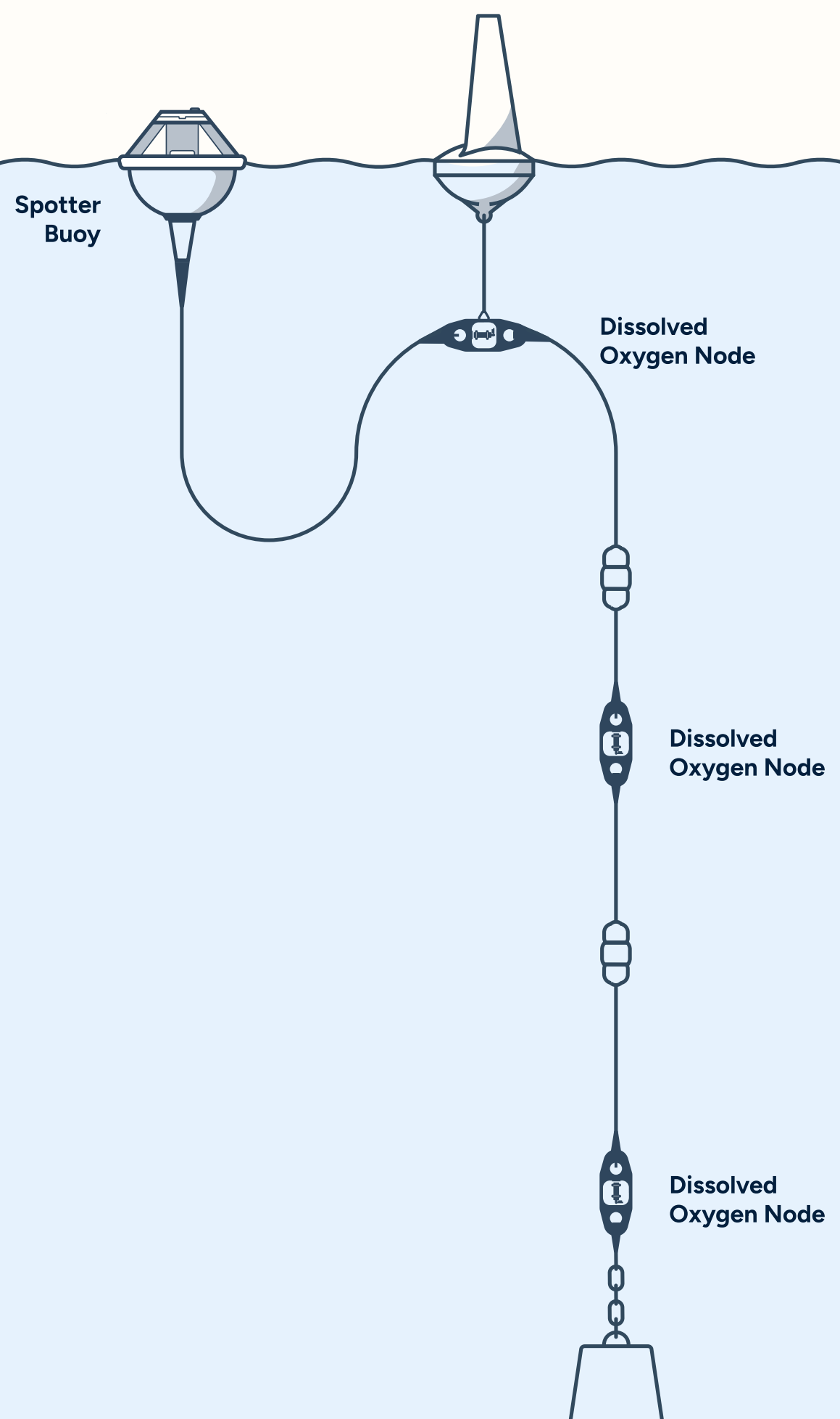
Identify hypoxic “dead zones,” track ocean climate change, and protect threatened ecosystems like coral reefs.

Aquaculture

Monitor long-term DO levels to streamline site assessment and track habitat health.

Offshore Engineering

Measure impacts of construction on water quality to comply with environmental regulations.



Core Specifications

Sensor	PME MiniDOT Logger (DO + Temperature)
Sensor Type	Optical
Dissolved Oxygen	Accuracy: ±5% or ±0.3 mg/L
	Resolution: 0.001 mg/L (1 µg/L)
	Range: 0 - 150% saturation
Temperature	Accuracy: ±0.1°C
	Resolution: 0.001°C
	Range: 0°C - 35°C
Oxygen Response Time	~30s to 90% step change
Sampling Rates	5 s to 24 hr interval, user-set
Calibration Method	96-point factory calibration
Maximum Depth	50 m
Power Supply	Spotter's Li-ion battery (solar-rechargeable)
Size (Dia. x Len.)	~76 mm × 203 mm
Weight	.34 kg (< 0.75 lb)
Interface Standard	Bristlemouth-native (plug-and-play)

When combined with salinity data, this sensor enhances measurement accuracy by providing salinity-compensated O₂ concentration (µmol/L) and O₂ saturation (%) readings.

Anti-Fouling Wiper

This submersible, self-contained device uses a rotating brush to sweep the sensor surface, reducing organism growth and preventing biofouling. After each pass, the brush retracts to avoid interference, ensuring accurate, continuous monitoring.

Deployment & Best Practices

Configuration Options

Ideal for moored coastal deployments with one Spotter or a network. Integrate up to two more devices (e.g. pressure/current) per Smart Mooring (max 3 total)

Mounting

Mount sensor horizontally; avoid sediment or bubble interference

Remote Configuration & Controls

Direct control via Spotter Dashboard, binary/ASCII commands, and Sofar remote support

Maintenance

Rinse sensor with fresh water after retrieval. Clean sensing foil periodically; verify calibration annually

Data Access & Analysis

Spotter Dashboard

View real-time data and insights

API Access

Retrieve data programmatically with our secure API

Onboard Storage

Download data via SD card for offline analysis

Transmission

Satellite and cellular options

