

Pressure Sensor • *Real-Time Water Level*



Monitor real-time water level and subsurface pressure with a rugged, ocean-grade piezoresistive sensor. An ultra-low power solar-rechargeable battery enables continuous access to precise, high-resolution measurements with minimal drift.

HIGH-IMPACT USE CASES

Coastal Resilience

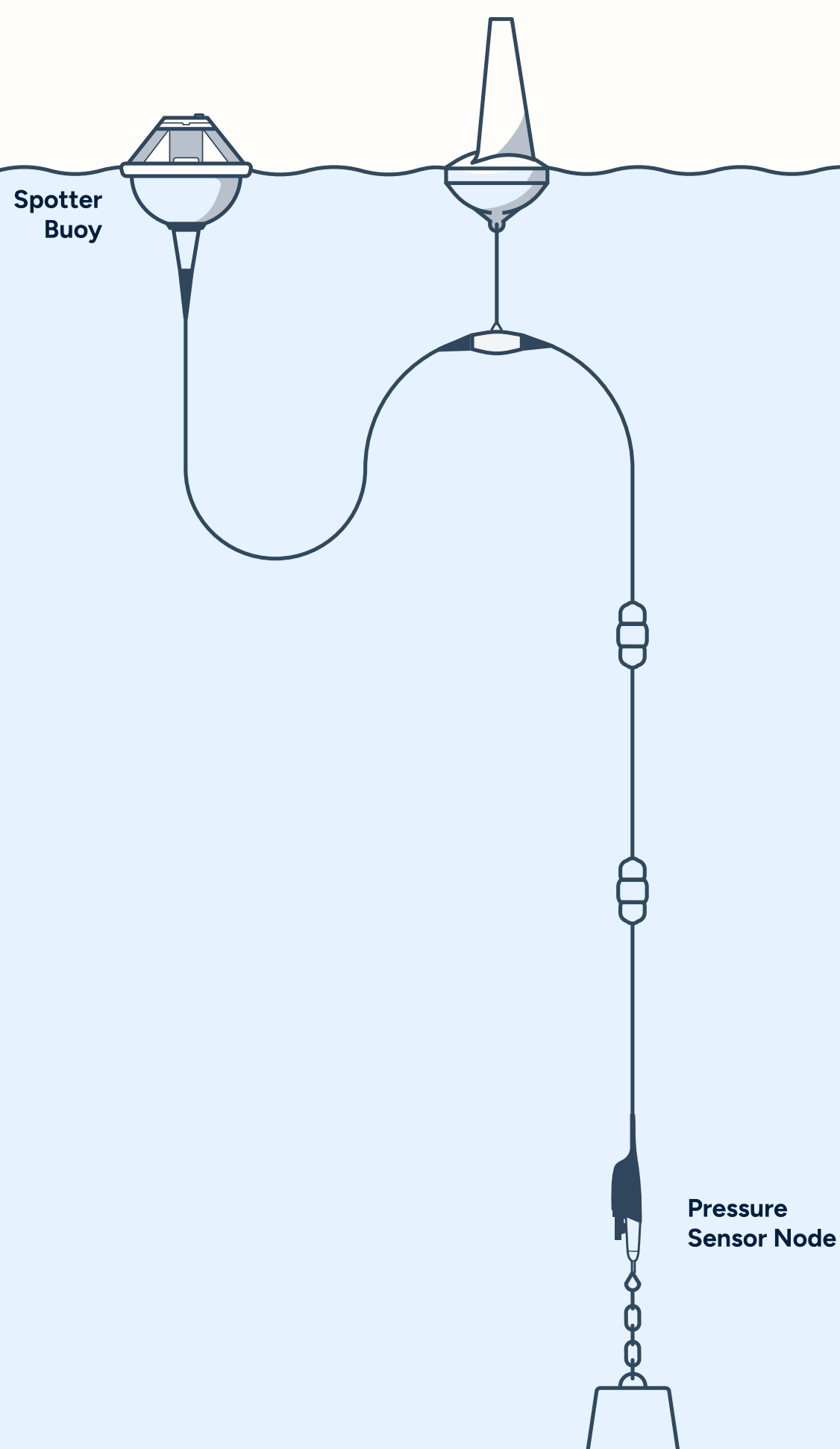
Continuously monitor water level nearshore to protect port infrastructure and coastal communities from storm surge and sea level rise.

Offshore Engineering

Remotely assess water level offshore to ensure safe navigation, operations, and ongoing maintenance.

Geological Monitoring

Detect dangerous shifts in subsurface pressure to inform early warning systems for tsunamis.



Core Specifications

Sensor	RBRcoda ³ D: Pressure Sensor (depth)
Sensor Type	Piezoresistive pressure transducer
Accuracy	±0.05% full scale
Resolution	<0.001% full scale
Range	20–1000 m
Stability	±0.05% full scale per year (typical drift)
Response Time	<10 ms
Sampling Rates	2 Hz (standard); up to 32 Hz (fast option)
Maximum Depth	50 m
Power Supply	Spotter's Li-ion battery (solar-rechargeable)
Size (Dia. x Len.)	~25 mm x ~235 mm
Weight	170 g (<0.4 lb)
Interface Standard	Bristlemouth-native (plug-and-play)

RBRcoda³ T.D: Temperature & Pressure (depth) is also available to combine measurements on a single device.

Deployment & Best Practices

Configuration Options

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

Calibration

Recalibrate annually to offset drift ($\pm 0.05\%$ FS/year)

Mounting

Mount with sensor head (pressure port) pointing downward to prevent debris clogging

Remote Configuration & Controls

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

Maintenance

Rinse with fresh water after retrieval

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

