

Current Meter



Add a rugged, single-point current meter to your Spotter Platform to measure subsurface current speed and direction in real time.

Sample precisely, rapidly, and at depth with motion-tolerant, tilt-compensated performance and energy-efficient solar-rechargeable power.

FEATURED IN

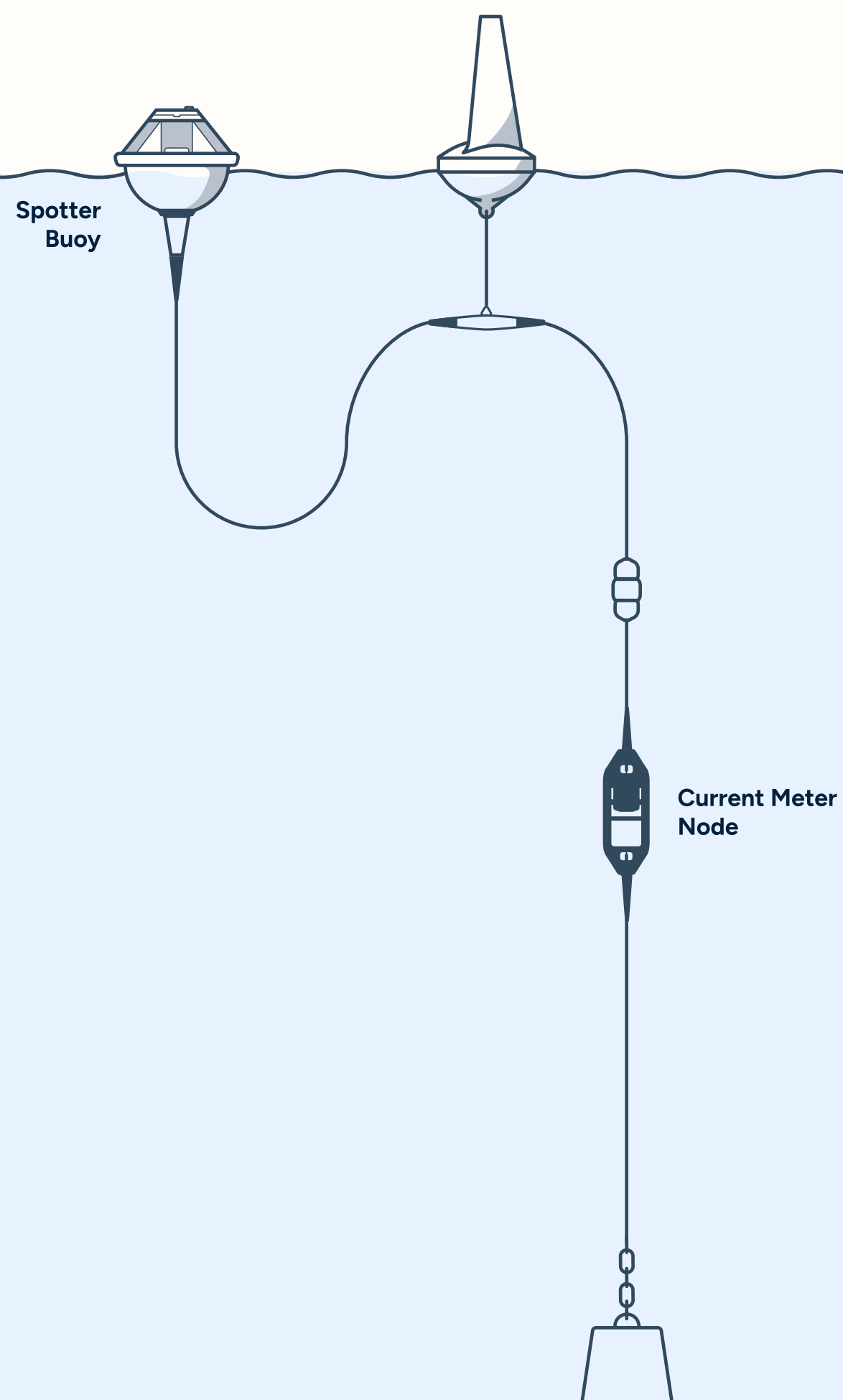
Spotter Currents

A turnkey solution for real-time subsurface current monitoring.

HIGH IMPACT USE CASES

- Offshore Site Assessment
- Maritime Navigation Safety
- Ocean Circulation Studies

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Core Specifications

Sensor	Aanderaa 4830 ZPulse® Doppler Current Sensor (DCS)
Category	Single-point acoustic Doppler current meter
Current Speed	Accuracy: ±0.15 cm/s or 1% reading
	Resolution: 0.1 mm/s
	Range: 0–300 cm/s (0–100 cm/s max when deployed)
Current Direction	Accuracy: ±5° (for tilt 0–15°) ±7.5° (tilt 15–35°)
	Resolution: 0.01°
	Range: 0–360° (magnetic)
Tilt Circuitry	Accuracy: ±1.5°
	Resolution: 0.01°
	Range: 0–35°
Compass Circuitry	Accuracy: ±3°
	Resolution: 0.01°
	Frequency: 1.9 to 2.0MHz
Temperature	Accuracy: ±0.1°C
	Resolution: 0.01°C
	Range: -5°C – 40°C
Sampling Method	~150 pings/axis; vector average; user-set interval
Transducers	4 units; 1.9–2.0 MHz; 2° beam; cell: 0.4–1.0 m
Maximum Depth	50 m
Power Supply	Spotter’s Li-ion battery (solar-rechargeable)
Size (Dia. x Len.)	120 mm × 108 mm
Weight	1.8 kg (~4 lbs)
Interface Standard	Bristlemouth-native (plug-and-play)

Deployment & Best Practices

Configuration Options

Ideal for moored coastal deployments (single Spotter or network). Supports up to two current sensors per Smart Mooring, plus one additional device (max 3 total).

Max Operational Conditions

Up to 100cm/s current velocity

Calibration

Recalibrate annually (~0.50% FS drift)

Mounting

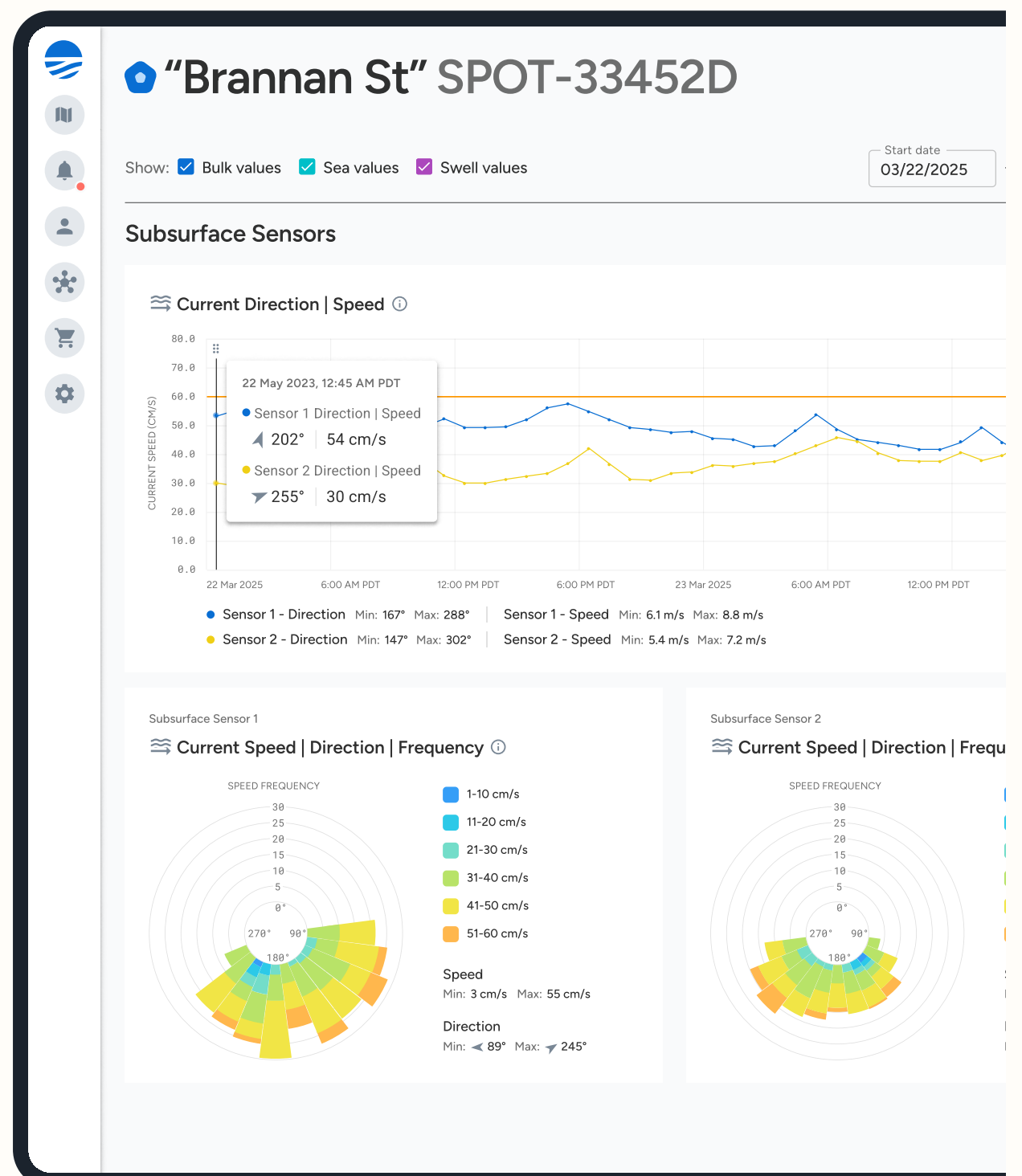
Mount with sensor head (pressure port) pointing downward to prevent debris clogging

Remote Configuration & Controls

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

Maintenance

Rinse with fresh water after retrieval. Clean the pressure port to remove debris



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