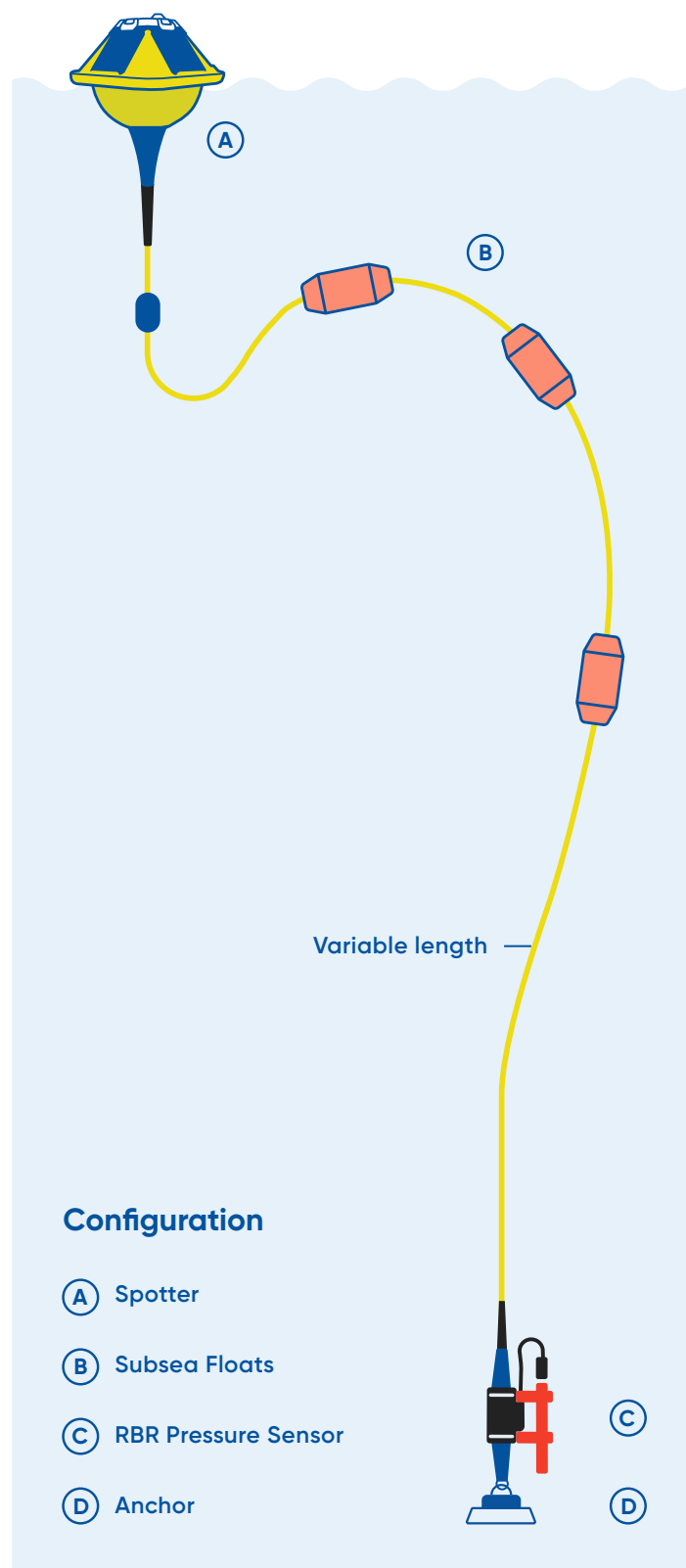


# Smart Mooring

## Water Level Gauge Specifications



### Configuration

- (A) Spotter
- (B) Subsea Floats
- (C) RBR Pressure Sensor
- (D) Anchor

### Smart Mooring System

Sensor options	Fully modular and interchangeable, RBRcoda <sup>3</sup> compatible.
Real time data	Configurable sample rates and windows. Data is sent over Iridium Satellite to the Spotter dashboard and the Sofar API.
Operational depth	Up to 100m

### Cable

Available lengths	5m, 10m, 25m, 35m, 50m
Jacketing	Thermoplastic polyurethane, high-visibility yellow, UV stabilized, cut and abrasion resistant.
Working load	2000N, kevlar reinforced
Diameter	10mm
Minimum bend radius	80mm
Conductors	2-conductor, 16awg (power + data)

### Sensors - Water Level Gauge Configuration

RBRcoda <sup>3</sup> D	Pressure (Depth)
Calibration Depths	20m, 50m, 100m
Accuracy	+/- 0.05% full scale
Resolution	<0.001% full scale
Dimensions	235 mm x Ø25mm x 100m
Weight	132G (air) / ~3G (water)
Maximum depth	10,000m

# Spotter

## Technical Specifications



### Specs

External dimensions [w X h]	42cm x 31cm (16.4in x 12.2in)
Weight (without external ballast chain)	5.3kg /11.6lbs (7.4kg /16.3lbs with external ballast chain)
Connectivity	Iridium SBD (satellite)
Primary power source	Solar Powered, 5x 2 Watt, 6 Volt solar panels
Battery	Lithium-ion, capacity 11,200 mAh, 3.7v (rechargeable)

### Motion Sensing




Motion Data Format	x (easting), y (northing), z (vertical, positive up), latitude (deg), longitude (deg)
Wave frequency range	0.03-1 Hz (30s to 1s)
Wave direction resolution	0 - 360 degrees (full circle)
Sampling rate	2.5 Hz (Nyquist @ 1.25Hz)
Wave displacement accuracy	Approximately +/- 2cm accuracy depends on field of view, weather conditions, and GPS system status
Sea surface temperature (SST)	Not available with Smart Mooring units
Calibration	Not needed, ever

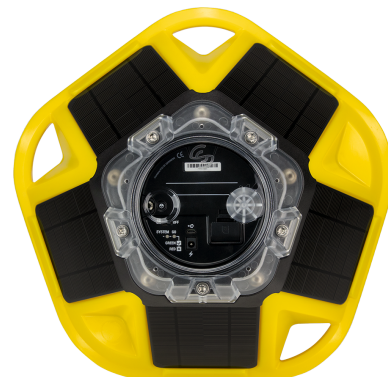
### Data Storage

 On-board (SD card)	Records time series of 3D displacement data, ships with 16GB (256GB max capacity), FAT16 or FAT32 Format required
 Cloud storage (online dashboard)	Online account includes: Real-time and historical data outputs, Spotter configurations, alerts, maps and 2-way communication

### Data Outputs

\* Can derive from SD card data.

	 Standard mode	 Spectrum mode	 On device
Significant wave height	x	x	x*
Peak Period	x	x	x*
Mean period	x	x	x*
Peak direction	x	x	x*
Mean direction	x	x	x*
Peak directional spread	x	x	x*
Mean directional spread	x	x	x*
Variance density spectrum		x	x
Directional moments (a1, b1, a2, b2)		x	x
3D Displacement Time series @ 2.5 Hz (x,y,z)			x
Sea Surface Temperature	Not available with Smart Mooring units.		
Wind speed	x	x	
Wind direction	x	x	x*
Drift speed			x*
Drift direction			x*
Geographical coordinates (lat, lon)	x	x	x*



42cm  
(16.4in)



31cm  
(12.2in)

### Additional specs

System monitoring	Battery power status
Advised mooring depth	Any depth
Visibility LED	1 flash every 2.5 sec, at least 1 mile visibility under normal conditions.
Firmware upgrade	Standard micro-USB (cable included)
Usability	Magnetic on/off switch, run/idle mode, user LED's and integrated grab handles.