



# SPOTTER™

## Technical Specifications

### SIZE AND WEIGHT

EXTERNAL DIMENSIONS [W X H]	42cm x 31cm (16.4in x 12.2in)
WEIGHT (WITHOUT EXTERNAL BALLAST CHAIN)	5.4kg (12lbs)
STAINLESS STEEL BALLAST CHAIN WEIGHT	2.174kg (4.79lbs)

### CONNECTIVITY:

CONNECTIVITY	Iridium SBD (satellite)
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### BATTERY AND POWER:

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.
CALIBRATION:	Not needed, ever.

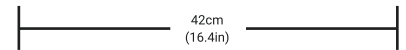
### DATA STORAGE:

 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) <a href="#">Click here to demo</a>	Access to online account that includes:  Real-time and historical data outputs, Spotter configurations, alerts, maps and two-way communication.

### DATA OUTPUTS:

	 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
WIND SPEED	X	X	
WIND DIRECTION	X	X	
DRIFT SPEED			X*
DRIFT DIRECTION			X*
GEOGRAPHICAL COORDINATES (lat, lon)	X	X	X*

\* Can derive from SD card data.



### OTHER

SYSTEM MONITORING	Battery power status
ADVISED MOORING DEPTH	Any depth
Visibility LED	1 flash every 2.5 seconds, 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.