



SirenSat Offshore

Installation & User Guide

Product Overview



The SirenSat Offshore system provides a practical solution for offshore vessel tracking beyond cellular range. This provides the ability to collect regularly updated location data that can be accessed through the Siren Marine smart device app and Siren Marine fleet app. The SirenSat Offshore also meets the requirement of several marine insurance companies that require vessels to have a satellite tracking application.

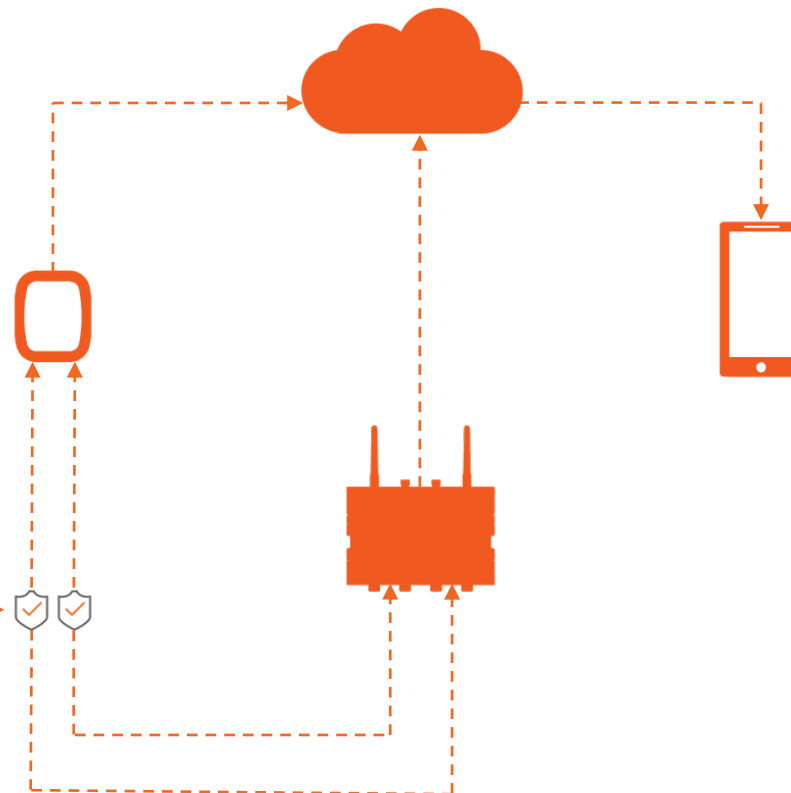
Once your vessel travels beyond cellular range, the SirenSat Offshore antenna will automatically take priority to provide position tracking. Live data updates will be provided to your Smart device or the Siren fleet app every five minutes.

Upon returning to cellular range coverage, the main Siren Marine device will re-establish a cellular connection and standard updates will resume. Notifications including sensor alerts that occurred while outside cellular coverage will be automatically transmitted to all Siren Marine applications.

This map outlines the complete SirenSat Offshore integration to your Siren Marine app.

The main Siren Marine device and SirenSat Offshore will upload data to the cloud. All collected data will then transmit to your smart device.

Note: Two wired security sensors can be connected to SirenSat Offshore and to the Siren Marine device. This provides you the option to use the same sensors for both devices rather than installing additional security sensors for each device.



Getting Started

Requirements

Before you begin, ensure that you have the necessary equipment and subscriptions needed to operate your SirenSat Offshore.

Each item listed below can be purchased by going to SirenMarine.com under our Products page:



SirenSat Offshore Antenna

The SirenSat Offshore Antenna will be required if you have not already purchased this device.



Siren Marine Main Device

A main device hub such as the Siren 3 Pro, Siren 3, or MTC must be installed on your vessel to operate all Siren Marine devices and send data to the Siren Marine device app.



Satellite Subscription

A satellite subscription is required to receive data from the SirenSat Offshore device. You will have the option between a 1-Year, 2-Year, or 3-Year subscription. Each subscription will auto-renew in your account.



Cellular Subscription

A cellular subscription is required as a foundation for operating your Siren Marine system. You will have the option between an Annual, Monthly, or Seasonal subscription. Each subscription will auto-renew in your account.

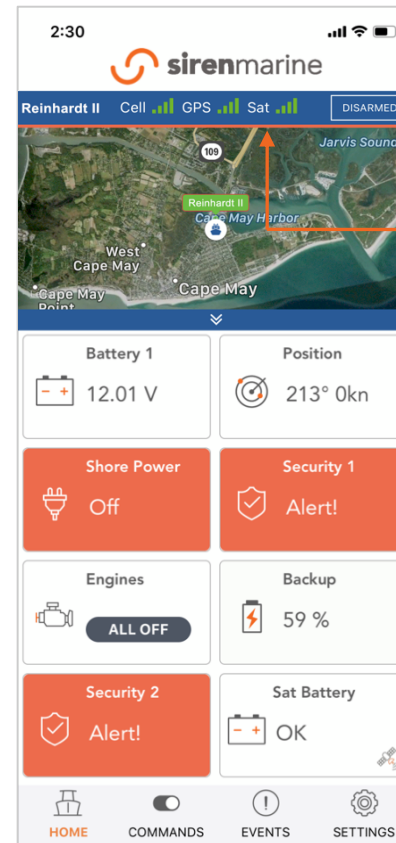
Pairing the SirenSat Offshore

The SirenSat Offshore system must be paired to the Siren Marine device app prior to installation.

The base of the SirenSat Offshore will have a barcode with serial number that is required to pair the system.

Follow these steps to pair the SirenSat Offshore:

1. Login to your Siren Marine device app
2. Select Settings > Add SirenSat device
3. Select OK or Allow to permit camera access if prompted
4. The screen will display an orange frame with the camera as shown. Hover the frame over the SirenSat Offshore barcode located at the base of the unit as shown.
5. Select Add when prompted.
6. A window will display reading "Successfully added your SirenSat Device" will display on your screen. Select OK.



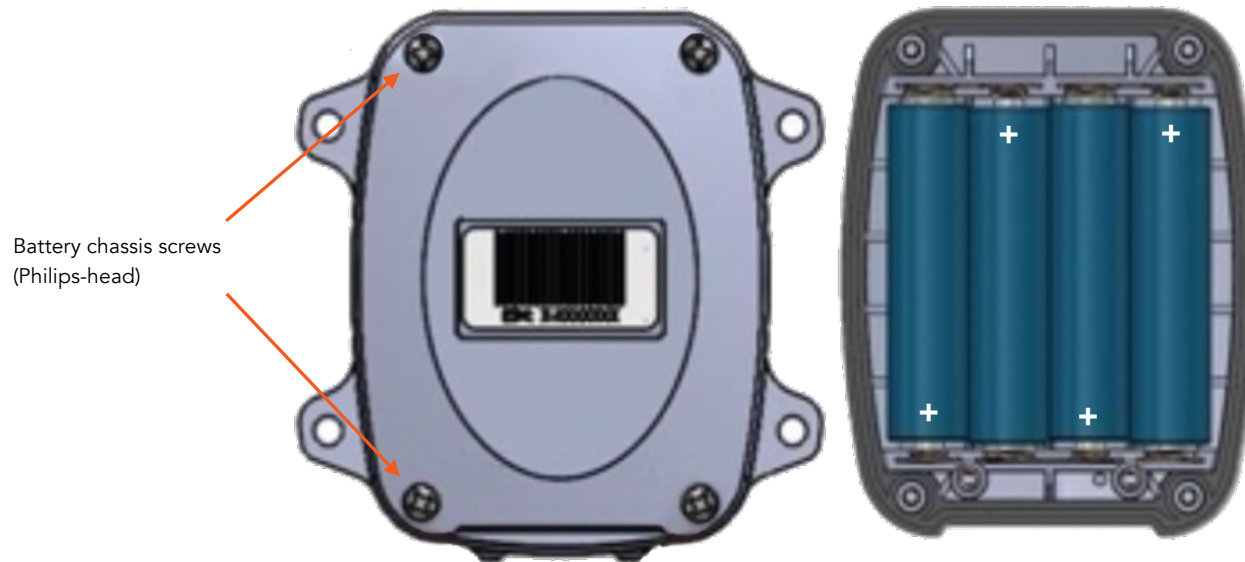
A new icon indicating the SirenSat Offshore signal strength will now appear at the top of the screen adjacent to Cell and GPS. The bar strength will turn green once the SirenSat Offshore is toggled ON and satellite signal is accessible (see Page 6).

The SirenSat Offshore battery icon will appear on your home screen. This will be listed as the Sat Battery tile to display its battery information.

Installing the Batteries

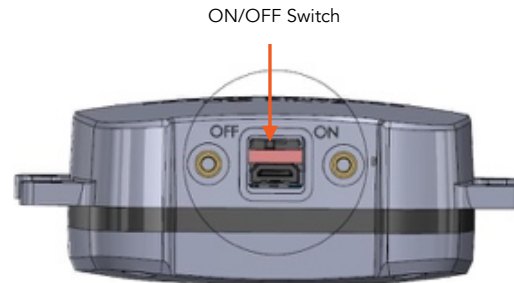
Install the supplied AAA lithium-ion batteries as shown below. You will need a small Philips-head screwdriver to open the battery chassis. The batteries will power the SirenSat Offshore for up to fifteen days without connection to an external power supply. Should the internal battery power drain to low battery, an alert will appear in the Siren Marine device app.

For maximum low-power protection, install the power/sensor wire harness (see Page 8).



Powering On

The SirenSat Offshore is equipped with a small ON/OFF switch located on the side of the antenna as shown below. The switch is directly above the mini-USB port and can be toggled using a tool such as a small flat-head screwdriver or pen. The SirenSat Offshore is supplied with the power in the OFF position.



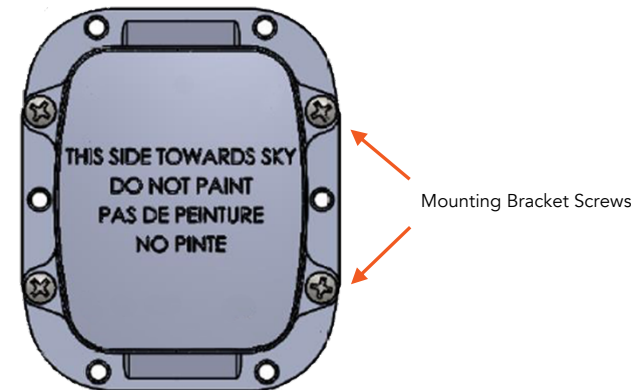
Once the switch is toggled ON, a location message will automatically be sent to the Siren Marine server. This will report up to every five minutes depending on boat motion as specified in the device overview. Location messages will then be updated to both the Siren Marine device app and fleet app.

Mounting

For best performance, it is recommended to mount the SirenSat Offshore outside and fully exposed to the sky with a clear 180° view. The antenna is also 100% weatherproof so exposure with water will not affect its operation. If this is not an option, the SirenSat Offshore can also be mounted in a location covered by wood or fiberglass (i.e. inside a console or electronics box). Please note that reception will be affected if the device is covered.

For a permanent installation, use the bracket and screws provided with the packaging (see image below).

For a temporary installation, use the industrial adhesives provided with the packaging. Please note that after the adhesive has fully bonded after 24 hours, removing the antenna could cause damage to the mounting surface.



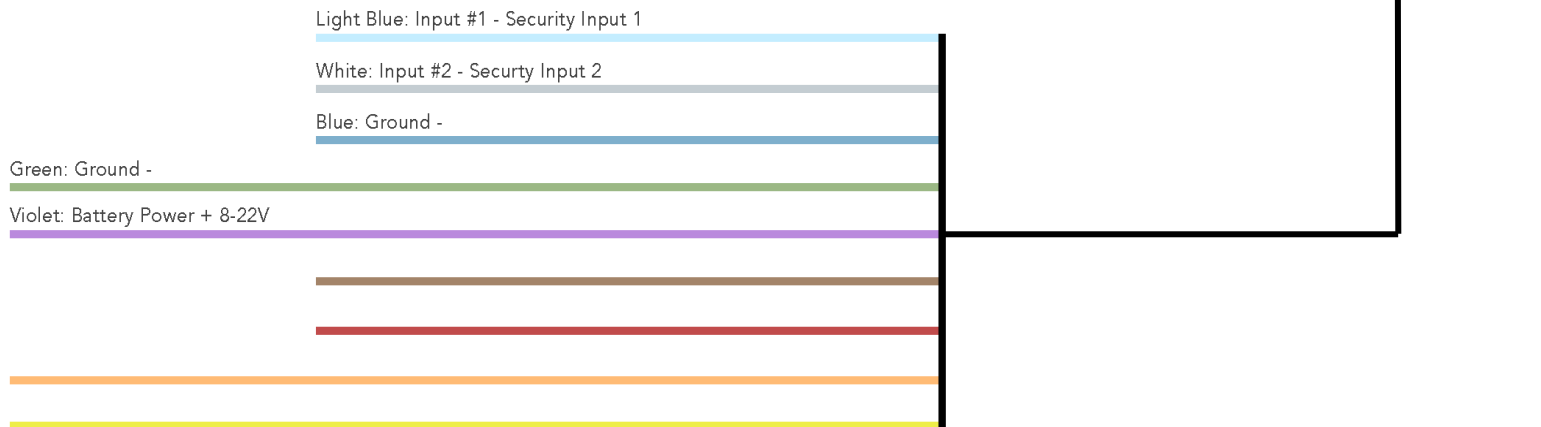
Note: Never mount the antenna within 1.5 meters of any large mass of metal, other antenna, or wiring. These materials or other appliances will block satellite reception if adjacent to the device.

Wiring

The SirenSat Offshore antenna should be connected to a battery source and external input sensors using the supplied wire harness. Please refer to the table and wiring diagram below:

Wire Color	Function
Violet	Battery Power + (8V – 22V)
Blue or Green	Battery Negative -
White	Input #1: Security 1
Light Blue	Input #2: Security 2

*Note: Either blue or green wire can go to battery negative.
Wiring both to battery negative is not a requirement.*



Connecting to External Power

It is recommended that the antenna is connected to the boat's 12V battery to preserve internal battery power. If external battery power to the SirenSat Offshore antenna is lost, it will remain powered by the internal batteries for approximately fifteen days depending on boat motion.

External power will not recharge the lithium-ion batteries in the SirenSat antenna. Actual duration of the internal battery power will depend on the actions of the vessel it is monitoring.

Please note that the SirenSat Offshore antenna consumes 0.27 mAh of battery power per day as it has been programmed to make a connection to its satellite system up to every five minutes. This frequency allows the Siren Marine geofence capabilities to be used while external to cellular coverage.

Note: SirenSat cannot be powered by more than 22V DC.

If your boat has a 24V system you cannot connect SirenSat directly to the battery or the Siren Marine main device without stepping the voltage down.

Power/sensor wire harness



Location Updates

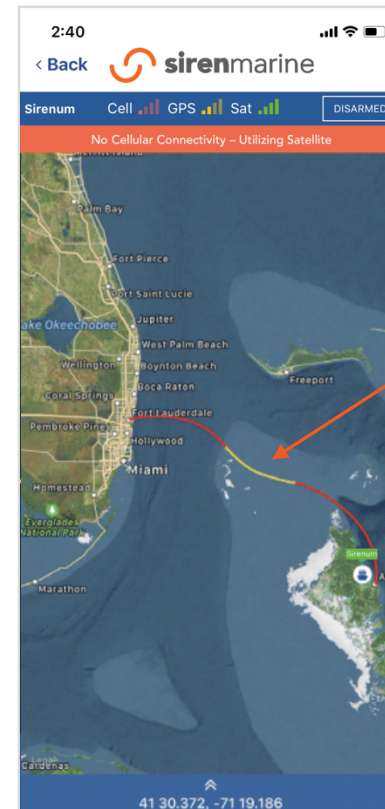
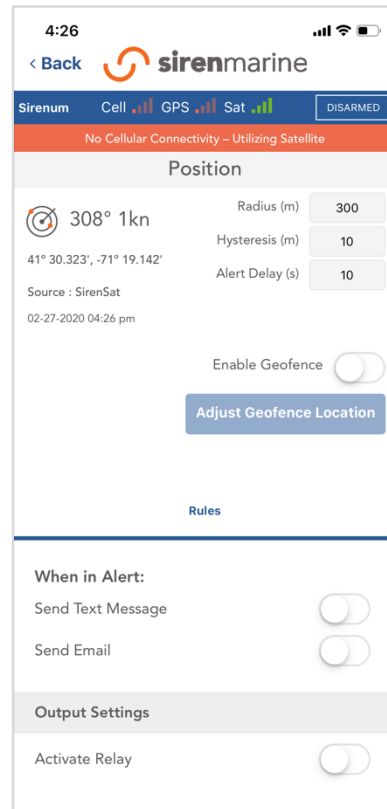
The SirenSat Offshore will send a location message to the Siren Marine server up to every five minutes depending on boat motion. Location updates are subject to change every 30 minutes if not in motion.

SirenSat Offshore vessel tracking updates will appear on the mobile app as a yellow tracking line, versus the red tracking line used to show the vessel is connected via cellular. Location updates begin when the antenna is switched ON and will continue thereafter.

Location update actions:

- View Position Reporting: Select the Position tile on the Home screen. This tile displays the information shown in the left image below.
- Stop Location Updates: Switch device OFF as shown on Page 6 under *Powering On*.
- Create Instant Update: Switch the device OFF > wait 60 seconds > toggle back ON (this will force a location update).

Satellite shows full signal strength and notification in the orange bar, both indicating that cellular connectivity has been lost and satellite has taken priority.



Satellite tracking will show in yellow when activated. Red indicates cellular signal is activated.

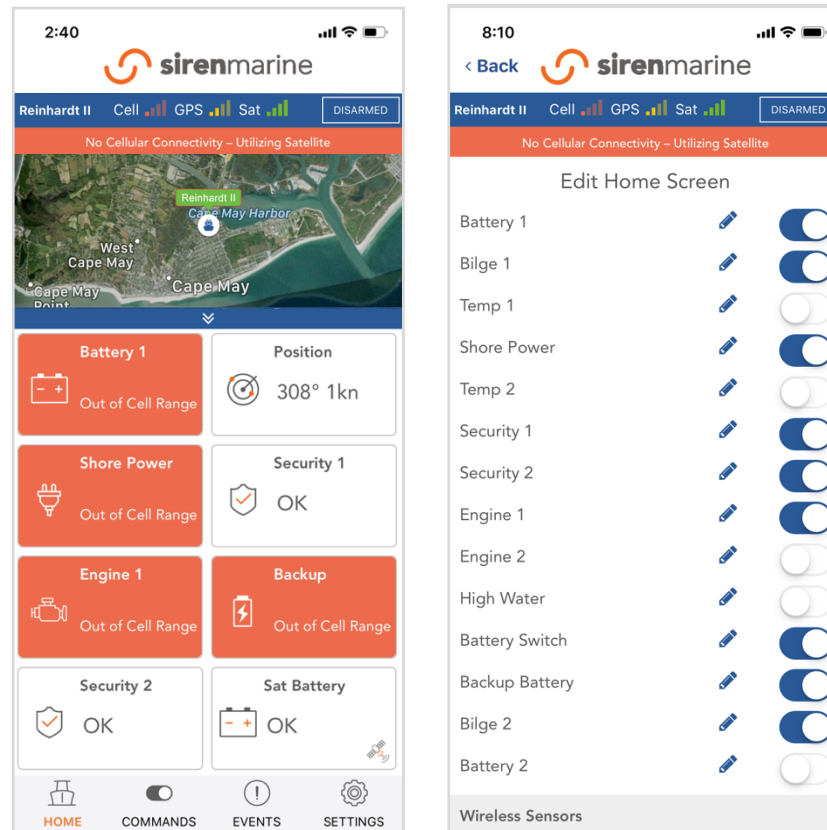
Security Alert Messaging

The SirenSat Offshore can process alert messages from two Siren Marine wired security sensors. These sensors include the following options:

- Magnetic Entry Reed Switch
- Canvas Snap
- Infrared Motion/ePIR
- Shore Power Plug

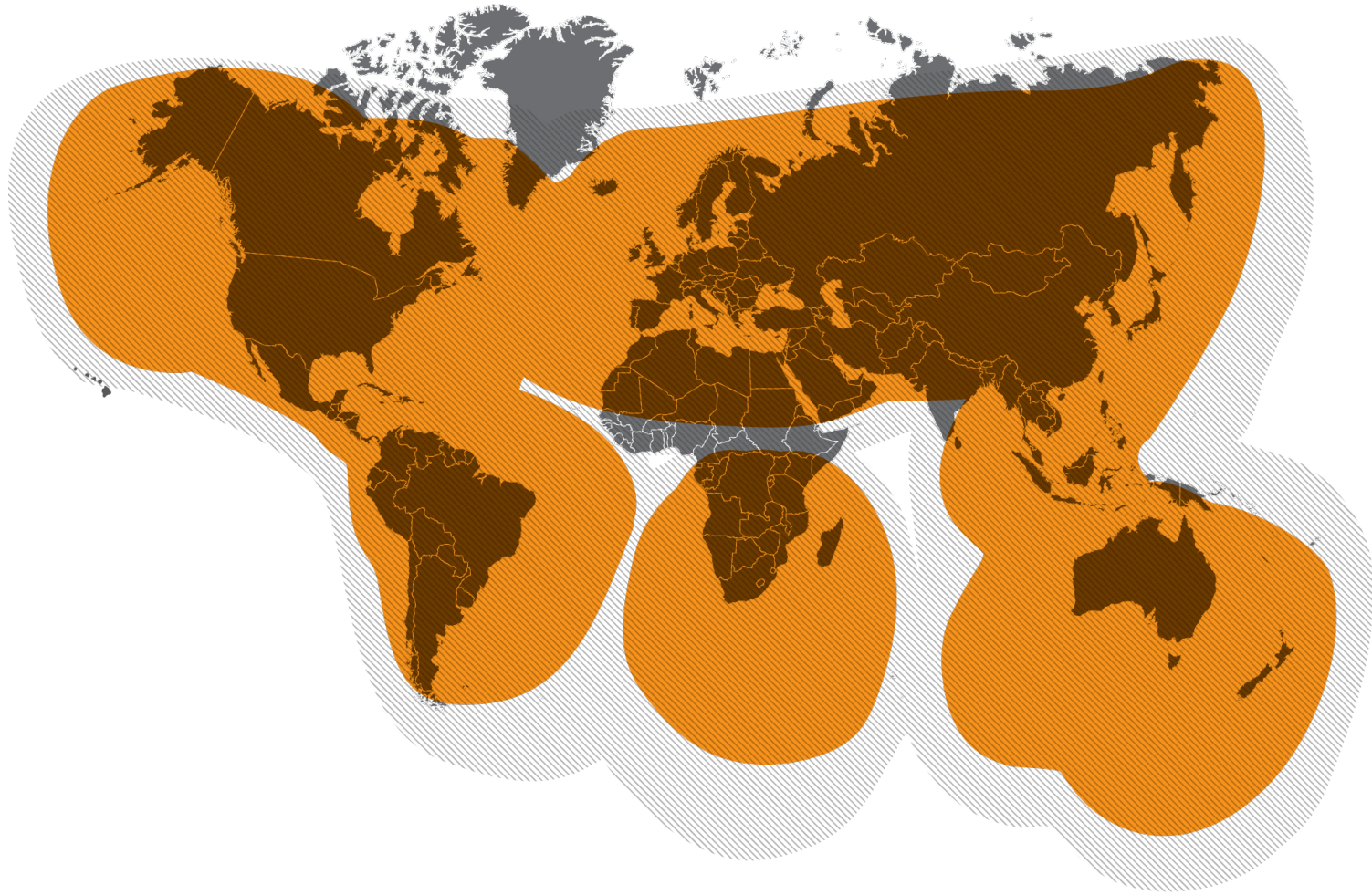
These wired sensors can be connected in series with the Siren Marine device or wired directly to the SirenSat Offshore harness if desired. Siren Marine wireless sensors will not work with the SirenSat Offshore. Users will only be alerted when these sensors are tripped into their alert state. Users will not be alerted when sensors return to their normal state. If wired security sensors are installed, be sure to turn ON the wired sensor tile in the Siren Marine device app to receive sensor status alerts.

To toggle on wired sensor tiles in the device app, go to Settings > Home Screen Settings > Toggle ON/OFF



Coverage Map

Satellite coverage areas provided by the SirenSat Offshore indicated on map below:



Technical Specifications

General

Dimensions	2.7in (H) x 3.25in (W) x 1in (D) / 68.58mm (H) x 82.55mm (W) x 25.4mm (D) <i>Brackets included in measurement</i>
Weight	3.6oz / 102g

Environmental

Operating Temperature	-22°F to +140°F / -30°C to +60°C
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Power Consumption

Line Power	5VDC or 8-22VDC with regulator cable
Battery Type	(4) AAA 1.5V Lithium-Ion 1.5+ years battery life

Certifications

ANATEL Certification for Brazil

FCC CFR Parts 15 & 25

Industry Canada

CE Red

Standards

SAE J1 455 MIL STD 810

NEMA 4X/1P68

RoHS Compliant

Satellite Technology

Global LEO Satellite Operation using the Globalstar Simplex Data Network

Questions?

Give us a call or send us an email.
We're standing by to help.

Customer Support

Call: (855) 757-4736

Email: support@sirenmarine.com

Hours: 8:30AM-5:00PM EST

sirenmarine.com

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