

# Guide to Personal Locator Beacons and Satellite Messengers

*Please note that the following excerpt from the REI website and the device information are simply to get you started. NVSHPO does not endorse any of these products and recommends further research prior to purchase of any device.*

**From REI by Lindsay McIntosh-Tolle:**

<https://www.rei.com/learn/expert-advice/personal-locator-beacons.html>

Choosing between a Personal Locator Beacon (PLB) and a Satellite Messenger (SM) 9-1-1 capability is limited in the outdoors, so having a personal location device is imperative in the case of an emergency. SMs allow for short message capabilities whereas PLBs only offer a location. SMs also offer additional features such as navigation. Keep in mind that global reach of these devices varies so be sure to check the coverage map for your chosen device(s).

## **PLBs:**

- Works in remote areas worldwide\*
- Multiyear battery life (replacement requires sending it in)
- No subscription fees
- No ability to send messages home or cancel an SOS call
- Stronger signal than a satellite messenger (unobstructed view of sky works best)

If you buy a PLB, you'll be required to register it (free of charge) in the NOAA SARSAT (Search and Rescue Satellite Aided Tracking) database. Your PLB unit's distress signal is then associated with vital personal information (like name, address, emergency contact phone numbers and medical conditions) that can help speed the response time for your rescuers. Note that you also need to update your data every two years and, if you ever sell or transfer ownership of your PLB, you must report that in this database and the next user is then required to register their personal data.

## **SMs:**

- Works worldwide, though coverage varies by brand\*
- Rechargeable batteries
- Requires a subscription (plans/fees vary widely)
- Can also send/receive non-emergency messages home (some only send them)
- Some models allow two-way texting to coordinate with rescuers after SOS calls; this also allows you to cancel an SOS call
- Unobstructed view of sky is needed for a good signal
- Offers a range of GPS navigation features, varying by model

Some SMs are beginning to function essentially the same as a GPS. They are now including features such as waypoint tracking and reporting your progress to people at home, topo-map navigation, altimeter and barometer functions, weather reports, sending and receiving customized messages, blue-tooth pairing with a phone for added functionality, ability to sync and be controlled by some fitness watches, and social media posting. Subscription plans are mandatory for SMs and often carry a hefty price tag with a dizzying amount of options. The plans include an activation fee as well as a monthly fee. There are contract and month to month options.

## Devices:



### Spot 3

Type: Satellite Messenger

Seller and Price: Amazon, \$148.98 (03/2020) Ranked #47 in handheld GPS units.

Key features: SOS, contact check in, assistance request from friends and family or professionals such as SAR, custom messaging, tracking using Google Maps. Service agreement required.

Cannot be used without paying for activation. Compact device, pocket sized. Dimensions: 2.6 x 1 x 3.4 inches; Weight: 4.0 ounces.



### Garmin InReach Mini

Type: Satellite Messenger

Seller and Price: Amazon, \$299.99 (03/2020) ranked "Amazon's Choice".

Key features: Small and rugged. 2 way text messaging (satellite subscription required).

Interactive SOS (satellite subscription required). Access to downloadable maps, US NOAA charts, color aerial imagery with use of Garmin Earthmate App. Optional InReach weather forecasts to pair to device. Send and receive messages with other compatible InReach devices. Unlimited Cloud storage. Screen size: 1.27 inches; dimensions: 2.0 x 1.3 x 3.9 inches; weight: 3.52 ounces.



### **Garmin InReach Explorer+ (Various Models Available)**

Type: Satellite Messenger

Seller and Price: Amazon, \$409.69 (03/2020) ranked “Amazon’s Choice”.

Key features: 100 percent global Iridium satellite coverage enables two way text messaging from anywhere (satellite subscription required). Track interactive SOS. 2 way messaging. Track and share location with family and friends. User is charged for messages sent and messages received. Pair with Mobile devices using Garmin Earthmate app. Preloaded Delorme topo maps with onscreen GPS routing plus built in digital compass, barometric altimeter and accelerometer. Screen size: 2.3 inches; dimensions: 1.5 x 2.7 x 6.5 inches; weight: 0.5 lbs.



### **ACR ResQLink 400**

Type: Personal Locator Beacon

Seller and Price: Amazon, \$299.95 (03/2020)

Key features: No subscription. Buoyant locator. LED and infrared strobe. GPS and Galileo GNSS locator signal. Global Coverage / Cospas-Sarsat / MEOSAR. Batteries expire about 5 years from manufacture date. Transmits signal for 24 hours after activation of distress signal. Dimensions: 2.4 x 2 x 1.5 inches; weight: 5.3 ounces.



### **Artex Personal Locator Beacon**

Type: Personal Locator Beacon

Seller and Price: Amazon, \$289.95 (03/2020)

Key features: No subscription. 406 MHz Distress Signal - Sent Directly to Search and Rescue Authorities Worldwide. LED strobe light. When activated, the ARTEX PLB transmits your position and your ID to a Rescue Coordination Center via satellite link. Rescue services nearest to you are promptly notified of your emergency and initiate the Search & Rescue process. Battery expires after about 7 years. It comes with mounting clip and flotation pouch. Dimensions: 2.1 x 1.3 x 3.0 inches; weight: 4.09 ounces.