



# Field Tracker 2100 vs. SPOT Messenger

## Reasons to go with Solara tracker:

### **1) It is built and supported as a professional tool that you can depend on.**

- The GPS is a high-performance SiRFStar chipset and the Iridium link is very robust. The satellites can be visible 360 degrees around a user anywhere on earth.
- Built and tested to withstand high shock and vibration environments, it is waterproof and works in a wide temperature range.
- Ruggedness and reliability - our unit is built with PLB and ELT-S environmental standards in mind.
- Our base unit does not use lithium batteries, so there are no concerns with dangerous goods in aircraft (although we do offer a lithium kit for extremely low temperatures).
- There is a graphic display for text messaging, changing unit setup parameters, displaying your GPS position, speed, and altitude. Unit parameters such as battery power left are also displayed.
- The built-in audible alarm can be triggered by remote control, such as a person monitoring the unit on the web page wants to know why a person unexpectedly hasn't moved for a long time. This audible enunciator can be programmed to beep when messages are received so the user is aware they have one. It can also be set up to beep under other conditions, such as when a message is confirmed as sent.

### **2) Two way communications - the other doesn't have it.**

- 2-way text messaging. In addition to being a simple way to communicate, this is important when reporting a distress call since the dispatcher can get additional information on the nature of the call and whether or not it is a false alarm - police are reluctant to respond to unconfirmed distress calls, they regard them the same as false alarms unless additional information is available. Part of this capability is being able to tell monitoring personnel whether you are in a boat, aircraft or on land.
- Globalstar simplex is less reliable - no way to confirm message sent. If it was, we would have used Globalstar ourselves. Also, Iridium has a solid product and is a profitable company with a bright future. We also offer an optional Alert monitoring service, but unlike Globalstar SPOT, our operators are able to communicate with the caller to get the nature of the emergency. Iridium messages from the Field Tracker have the same priority as voice calls.
- Parameters can be programmed over the air.

### **3) The comfort of a reliable power supply and longest lasting operational performance.**

- Internal rechargeable battery that can be charged from an AC wall outlet, vehicle or DC power or by an optional solar panel. This unit is designed to never leave the user without the power to send a message.

### **4) Monitoring capabilities that can be scaled to meet your performance requirements.**

- The Solara web site allows tracking multiple units on one page. Setup parameters and messages (including broadcasts to multiple units) can also be sent this way. You can also set up messages to be repeated to cell phones as emailed messages, automated telephone calls out to numbers you specify, and email forwarding.
- For aircraft users - on the client login area of the web page - can add additional parameters for heading, altitude and GPS status. Additional custom maps can be added, as well as aviation weather and radar.



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Attribute	Field Tracker 2100	SPOT Messenger
Satellite System Used	Iridium – Profitable for the last several years, last quarter was the best one ever with extensive growth in voice and data markets	Globalstar – operating loss and lower revenues for past several years, failing voice system, launches of new satellites delayed over a year
Satellite Coverage in North America	Iridium – covers the entire earth	Globalstar – covers North America to about 68 degrees latitude
Primary Use	Multi-user two-way communications and variable interval tracking. Designed for professional use.	Single-user one-way signalling and fixed interval tracking. Designed for consumer use.
Satellite Transmissions	Two-way, with transmissions confirmed	One-way, transmissions not confirmed
System User Interface	Web page and customizable to other standalone map programs	Web page only
Field Unit User Interface	132 x 132 pixel graphic colour display and 4 LEDs, keypad on front, two sealed toggle switches recessed on side as per PLB engineering specs and external power hookup	Four raised front pushbutton switches and 4 LEDs
Hardware Accessories	<ul style="list-style-type: none"> <li>-folded solar cell charge panel</li> <li>-2 different 110V-220V wall chargers</li> <li>-external AA battery holder to supplement power, especially for low-temp lithiums</li> <li>-direct connect power connector to battery</li> <li>-vehicle mount for aircraft, vehicles, ATVs, etc. (in April 2010)</li> <li>-fabric carrying case that also affords the unit floatation (in April 2010)</li> </ul>	-carrying pouch
Messaging	<ul style="list-style-type: none"> <li>i) GPS positions, tracking and alert messages, recipients configurable</li> <li>ii) Text Messages Received</li> <li>iii) Text Messages Transmitted</li> <li>iv) Unit status telemetry</li> <li>v) Over-the-air Programming</li> <li>vi) Alert message monitoring optional</li> </ul>	i) GPS positions, tracking or single "911" Message to a designated contractor
Web Page interface (Google Maps)	Yes	Yes
User-installable Map Client Available	Yes	No
Sends GPS Track of User	Yes, interval configurable by user and over the air	Yes – with caveat that there may be satellite signal transmission failure due to lack of a Globalstar satellite in sight, and only at a 10 minute interval
Sends Single Messages with Location	Yes	Yes
Sends Distress Message	Yes, recipient/responder is set up in accordance with needs of user, 2-way communication gives reason for alert	Yes, to a designated contractor, calls it "911" but no way to confirm if it's real with the user in the field
Verifies Each Message Successfully Received	Yes	No
Track Multiple Units on One Map	Yes	No
Automatic Flight Following (AFF) Option?	Yes	No
Reconfigure Units Over the Air from the Web Page	Yes	No
Graphical Display on Unit	Yes	No
Reconfigure Tracking Transmit Interval in Field	Yes	No
Multiple types of text messages can be send from field	Yes	No
Can converse with safety personnel monitoring messages by text message to describe nature of the problem	Yes	No
Rechargeable Battery	Yes	No
Built and Tested to Established	Yes	No



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Applicable Standards for Class 2 PLBs		
Warranty	1 year	1 year
Verification of Nature of Emergency with Emergency Dispatch Service	Yes	No
Forwarding Messages by Email	Yes, triggers and destination set by user by type of message	Yes
Forwarding Messages by Telephone	Yes, system phones numbers designated on the web page	No
Forwarding of Messages by SMS Cell Phone Messaging	Yes, including user-configurable text messages to cell phone email address	Yes, one message type
Customized Options (Hardware & Software)	Yes, designed and built by Solara. Can customize case type, unit code and data centre operations	No
Patents Pending	Yes	No
Built-in GPS	Yes, SiRFstarIII	Yes, Nemerix
Display of GPS Position	Yes	No
Display of Heading, Speed, Altitude	Yes, using GPS	No
Time Display	Yes	No
Audio Alert for Incoming Messages	Yes	No
Multiple Power Sources	Yes	No
Run from Vehicle Accessory Power	Yes	No
Transmits when GPS Fix not achieved	Yes	Only for "911" and Check-in messages
Backup Location if no GPS	Yes, Iridium has rough doppler position	No
Rechargeable from Building outlets, Vehicle Accessory Connector or DC Source	Yes, 8 volts to 32 volts input, in vehicles and aircraft	No
Supplementary Operation and Charge and Emergency Power from Solar Cell	Yes	No
Comprehensive Follow-up of Notifications and Special Messages as Arranged with Customer?	Yes	No
Case Tested for High Shock and Vibration Survival	Yes, to PLB environmental specifications	Yes, to J1455 industrial specification
Cold weather rating	Yes to -40 degrees Celsius	Yes to -40 degrees Celsius
Waterproof	Yes	Yes
Firmware upgrades available in the future?	Yes	No