

### IRIDIUM™ HANDHELD TRACKER: SHOUT ts



- Low-cost tracker and messaging device
- Programmed for either DoD or commercial Iridium gateway
- ✓ Ultra-low power consumption
- ✓ Automatic location reports (>1500 reports)
- ✓ Guarded 911 alert switch
- ✓ High resolution touchscreen
- Free-text, canned messages or combined free-text and canned messages
- ✓ Data logging (waypoints and tracking reports)
- ✓ 256-bit AES encryption
- ✓ Real-time, pole-to-pole coverage
- ✓ Weighs ~7.2 ounces
- ✓ Volume of 4.1" x 2.3" x 0.9"
- Internal rechargeable battery using AC adapter, computer USB port or solar charger
- ✓ Integrated motion sensor
- ✓ USB interface
- √ 50-channel GPS receiver with -160 dBm sensitivity

#### HANDHELD TRACKER/MESSAGING DEVICE: SHOUT ts

The SHOUT ts is a handheld, global, two-way satellite messaging and personal tracking device. It utilizes Iridium's short burst data (SBD) service to provide location information determined by a GPS receiver, two-way inbound and outbound status, text messaging, and emergency/alert notifications. The ts measures 4.1" x 2.3" x 0.9" and weighs  $\sim 7.2$  ounces.

The ts is designed with ultra-low power consumption electronics drawing less than  $35\mu A$  during sleep. With an internal 1.95 A-Hr rechargeable Li-Ion battery, it can send a position report every hour for up to two months (about 1,500 reports). The ts is equipped with a high resolution color touchscreen supporting transmission of free-text, canned messages and a combination of free-text and canned messages. Similar to a "smart" phone, the menu options are displayed as icons for quick access. The device can periodically wake up from sleep to send its position report to a command center. A 911 button is used for immediate emergency/alert notifications. Data are packaged in either standard or 256-bit AES encrypted format. Data can also be sent in encrypted PECOS formats to include Brevity codes.

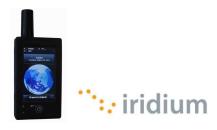
The ts offers a variety of services including:

- Normal Tracking programmed to automatically wake up and send a
  position report at a set interval ranging from continuous to once
  every seven days.
- Emergency Alert sends alerts to a designated monitoring center using a 911 button. The monitoring center and the user can then communicate to define further specifics of the emergency.
- Free-Text Messaging sends free-text via four different sets of onscreen keyboards.
- Canned Text Messaging sends canned (pre-defined) messages in short codes to save bandwidth instead of the entire message body.
- Waypoint Tracking sends and/or saves waypoints (interested landmarks) for later retrieval.
- Check-In allows a quick check-in message to be sent using a single soft key.





# IRIDIUM<sup>™</sup> HANDHELD TRACKER: SHOUT ts



- ✓ Pocket-size, self-contained satellite tracker
- ✓ Ultra-low power consumption
- ✓ AES 256-bit encryption both transmit/receive
- √ Two-way communications
- √ Real-time reporting
- Truly global coverage

#### **Specifications**

Mechanical

Dimensions:  $4.1'' L \times 2.3'' W \times 0.9'' D$ 

Weight: ~7.2 Oz

I/O Interface: USB

Cooling: Convection

Enclosure: Hard-Anodized Aluminum

Electrical

Input Voltage Range: 2.7VDC to 5.5VDC

Input Nominal Voltage: 4.0VDC

Power consumption during standby: less than  $35\mu A$  @ 5.0VDC

Power Input Type: External DC power or internal battery

Iridium RF Board

Operating Frequency: 1616 to 1626.5 MHz
Link Margin Downlink: 13 dB average
Link Margin Uplink: 7 dB average

Average Power Transmission: 1.0 W

**GPS** Receiver

Receiver Type: 1575.42 MHz (L1), 50-channel, C/A code

Accuracy: 2.5 m CEP Update Rate: 4 Hz

Start-up Times: < 1 sec hot start, 29 sec warm start and 29 sec cold start

Sensitivity: -160 dBm

Environmental

Operating Temperature:  $-40^{\circ}F$  to  $+185^{\circ}F$  ( $-40^{\circ}C$  to  $+85^{\circ}C$ )

Operating Humidity: < 75% RH



# IRIDIUM<sup>™</sup> HANDHELD TRACKER: SHOUT ts



- Power/Back: 1. Used to turn device ON/OFF when hold down for two seconds or 2. Used to go back to a previous menu.
- (2) LED: Displays tracking and emergency statuses.
- 3 USB Port: Used to charge the battery, update firmware or setup operating parameters using a computer.
- (4) Touchscreen: Used to access device features.
- 5 Antenna: Iridium antenna.
- 6 Antenna: GPS antenna.
- 7 Guard: Protects emergency button from being accidentally activated.
- $\left(8\right)$  Emergency: Used to send an emergency alert/notification.

