

## IRIDIUM™ HANDHELD TRACKER: SHOUT nano



- ✓ Low-cost tracker and messaging device
- ✓ Programmed for either DoD or commercial Iridium gateway
- ✓ Ultra-low power consumption
- ✓ Automatic location reports (>1600 reports)
- ✓ Guarded 911 alert switch
- ✓ Waypoint soft key
- ✓ Check-in soft key
- ✓ Free-text, canned messages or combined free-text and canned messages
- ✓ Data logging (waypoints)
- ✓ 256-bit AES encryption
- ✓ Real-time, pole-to-pole coverage
- ✓ Weighs ~6.5 ounces
- ✓ Volume of 4.0" x 2.2" x 0.8"
- ✓ 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 nano

SHOUT nano is a handheld, low-cost, satellite tracker and messaging device designed to operate with the Iridium low-Earth orbit satellite network. The SHOUT nano measures 4.0" x 2.2" x 0.8" and weighs ~6.5 ounces.

The SHOUT nano is designed with ultra-low power consumption electronics drawing less than 40 $\mu$ A during sleep. With an internal 2.0 A-Hr rechargeable Li-Ion battery, it can send a position report every hour for up to two months (about 1,600 reports). The SHOUT nano is equipped with a high resolution color LCD and on-screen keyboards supporting transmission of free-text, canned messages and a combination of free-text and canned messages. The menu options are displayed in icons for quick access instead of line-text. 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.

The SHOUT nano 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 three different sets of on-screen 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 HANDHELD TRACKER**  
POWERED by the IRIDIUM NETWORK



 iridium

# IRIDIUM™ HANDHELD TRACKER: SHOUT nano



- ✓ 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

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## Specifications

### Mechanical

Dimensions:	4.0" L x 2.2" W x 0.8" D
Weight:	~6.5 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 40µA @ 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°F to +185°F (-40°C to +85°C)
Operating Humidity:	< 75% RH

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