



HANDHELD TRACKER/MESSAGING DEVICE: IRIDIUM SHOUT NANO

The Nano is a handheld, low-cost, satellite tracker and messaging device designed to operate with the Iridium low-Earth orbit satellite network.

It is designed with ultra-low power consumption electronics drawing less than 40A 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 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 panic button is used for immediate emergency/alert notifications. Data are packaged in either standard or 256-bit AES encrypted format

The 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.

Fastwave Communications Pty Ltd
60 Coghlan Rd Subiaco WA 6008 AUSTRALIA
T +61(8) 9381 5353 F +61(8) 9381 5885
info@fastwave.com.au
www.fastwave.com.au

Shout Nano Features

- ✓ Global, real-time coverage via Iridium Satellite
- ✓ Ultra-low power consumption
- ✓ Automatic location reports (>1600 reports)
- ✓ Guarded panic 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
- ✓ Weighs ~ 185 grams
- ✓ Volume of 102mm x 56mm x 21mm
- ✓ 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

Specifications

Mechanical

Dimensions: 102mm L x 56mm W x 21mm D
Weight: ~ 185grams
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 40A @ 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: 40oF to +185oF (40oC to +85oC)
Operating Humidity: < 75% RH

Fastwave Communications Pty Ltd
60 Coghlan Rd Subiaco WA 6008 AUSTRALIA
T +61(8) 9381 5353 F +61(8) 9381 5885
info@fastwave.com.au
www.fastwave.com.au