NAL RESEARCH

Innovative, Military-Grade, Global SATCOM and A-PNT Solutions

SHOUT tsA

Handheld Tracker with GPS-Independent Positioning

Gateways
DoD & Commercial Iridium

Canned Messages
Uses short codes for quick response & to save bandwidth

Alternative-RF PNT
Positioning Independent of GPS

Multi-Source Assured PNT Handheld

The SHOUT tsA is a handheld, global, two-way satellite messaging and personal tracking device capablee of obtaining Poistion Location Information (PLI) in the presence of enemy and environmental threats to GPS signal. It contains an Alt-RF receiver, high-accuracy L1 GNSS receiver, USB interface, and several low power micro-controllers. Maximize mission-life with it's internal 3.6 A-Hr rechargeable Li-Ion battey; a 67% capacity increase from the SHOUT ts. Includes NAL SatTerm PC software for users to setup custom operating parameters, geofences, contacts, and canned messages.

Key Features

- Body-Worn Tracker & Messaging
- Commercial GNSS & Alt-RF PNT
- Guarded 911 Alert Switch
- High-Resolution Touchscreen
- Messaging
  - Free text
  - Canned messages
  - Combination of Both
- 256-bit AES Encryption
- Real-Time, Pole-to-Pole Coverage
- Integrated Motion Sensor
- 72-Channel GPS Receiver with –160 dBm Sensitivity
- Compatible Airtime Service(s): SBD

Use Cases

- ***Normal Tracking:*** Programmed to wake up automatically and send a position report at an interval ranging from once per minute to once per day.
- ***Emergency Alert:*** Send alerts to designated monitoring center using the 911 button. The monitoring center and user can then communicate to define further specifics for the emergency.
- ***Messaging:*** Send free-text via four sets of different on-screen keyboards. Send canned messages in short codes for quick response or to save bandwidth. Send quick check-in message using a single soft key.
- ***Waypoint Tracking:*** Send and / or save waypoints for later retrieval.

SHOUT tsA

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SCAN ME

What's In the Box?

- SHOUT tsA
- Power Adapter
- USB Charging Cable

Device Specifications

Weight:	~15 oz (0.42 kg)
Dimensions:	4.76"L (122 mm) x 2.9"W (74 mm) x 1.2"D (31 mm)
I/O Interface:	USB-C
Cooling:	Convection Cooling
Enclosure:	Hard, Anodized Aluminum (EMI shielded)
Input Voltage Range:	2.7VDC to 5.5VDC
Battery:	3.6A-Hr Rechargeable Lithium Ion
Operating Temperature:	–4°F to +140°F (–20°C to +60°C)
Operating Humidity:	< 75% RH

Iridium Transceiver

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), 72 channel, C/A code
Accuracy:	2.5 m CEP
Update Rate:	4 Hz
Start-up Times:	< 1 sec hot start, 29 sec warm start, & 29 sec cold start
Sensitivity:	–160 dBm

Alt-RF Receiver

Receiver Type:	L-Band
Static Position Accuracy:	+/- 100m with open sky view
Dynamic Position Accuracy:	+/- 100m with open sky view