

## GSatMicro

Track and manage your mobile assets

# Personal Iridium Tracker

The smallest self-contained Iridium tracker in the world.

## What is the GSatMicro?

The GSatMicro is a powerful, small, customizable, self-contained Iridium tracker. It transmits positions, SOS alerts and other specialized information through its industry-leading satellite antenna and electronics technology to be monitored and analyzed in real time. Configuration capabilities enable the support of any asset and type of information, allowing the GSatMicro to be used in many different applications.

## Truly Global Operation

By utilizing the Iridium network, the GSatMicro can track any asset, anywhere on earth using the most advanced low earth orbiting satellite network in existence.



## Small & Powerful

The GSatMicro is not much larger than a golf ball! Yet, state-of-the-art technology is combined with ingenious hardware development to create one of the world's most powerful satellite trackers.

## LUA Scripting

The GSatMicro takes advantage of advanced, customizable behaviors through the power of LUA scripting. LUA provides controls over hardware functions and its software integration with other products.



## Markets

- Broadcasting
- Emergency Relief
- Government
- Maritime
- Military
- Personnel
- SCADA
- Security

## Includes

- Lua Scripting Language
- Bluetooth 4.0 (BLE)
- AES 256-bit Encryption
- Latest SIRFstarV GPS
- USB & RS232 Interface
- Internal 2.5Ah Battery

# GSatMicro

## Specification Overview

### Features

- 32-bit ARM processor with a user customizable LUA scripting language
- Internal dimensions 1.77 x 1.77 x 1.34 inches (45 x 45 x 34mm),
  - Including battery, modem & antenna
- SIRFstarV GPS with an amazing -163dBm sensitivity
- AES 256-bit encryption
- Bluetooth 4.0 (BLE)
- Built in 2.5Ah Lithium Polymer battery & charger
- Accelerometer and Magnetic Compass
- Battery Fuel Gauge
- Integrated high gain ceramic antenna dual tuned for Iridium and GPS
- Over the air configuration of the terminal
- Truly global coverage with the Iridium satellite network

### LUA Scripting

Lua scripting provides powerful and customizable behaviors for the GSatMicro. So what does “scripting” mean for me?

#### Scripting Examples:

- Behavior monitoring and transmission using accelerometer
- External interfaces to additional equipment
- Data logging and queued transmissions
- Lone worker monitoring and lack of movement monitoring
- Customized control of LED's
- Customized software applications over Bluetooth
- Custom message formats and full protocol control
- Geofencing behavior and alarm management



### Interfaces

USB DC Input (4.5V to 5.5V)  
High Voltage DC Input (7.5V to 36V)

- (protected to 40V DC)

USB Interface  
RS232 Interface  
2 Relay Outputs @ 2A  
2 Analog Inputs (0V to 30V DC)  
Optional SMA antenna connector

### Communication

UART - NMEA (Default)

### NMEA message Switchable

GGA, RMC, GSA, GSV, VTG, GLL, ZDA

### Channels

48

### Correlators

~ 400,000

### Frequency

LI - 1,575 MHz

### Sensitivity

Tracking: - 163 dBm  
Navigation: - 160 dBm  
Aquisition (cold start): - 148 dBm

### Position Accuracy

< 2.5 m CEP (autonomous)  
< 2.0 m CEP SBAS (horizontal)

### Time To First Fix

Hot Start: < 1 s, Warm Start: < 32 s  
Cold Start: < 35 s

