

## GSatMicro X Series

Send and Receive data anywhere in the world



# Dual Network Iridium Tracker

The original GSatMicro Series enhanced with a GSM chipset for hybrid satellite and cellular solutions.

## What is the GSatMicro X Series?

The X models of the GSatMicro Series add a redundant layer of communications by adding GSM capabilities to create a true hybrid solution.

## Customize it to your needs!

You are able to customize all aspects of the GSatMicro Series, even the network you want to connect to. The X Series adds a GSM module to your terminal enabling the ability to have multiple layers of network connectivity creating a redundant platform for your communications. Working as hybrid solutions, the GSatMicro X and the GSatMicro OEM X, have the capability to switch flawlessly between local, land-based cellular networks and Iridium's globally accessible satellite network.

## Same Small & Powerful Aspect

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.

## Highly versatile options

Not only does a multi-network hybrid solution provide always-available communications, it can also reduce costs by using GSM as a less expensive way to send and receive data. You also have the option to choose which network is the primary means of transmitting data and which network is the failover network used for backup communications.

## Sectors

Aerospace  
Enterprise  
Government  
Maritime

## Markets

Aviation  
Rotorcraft  
Space

Agriculture  
Broadcasting  
Construction  
Emergency Response  
Energy  
Forestry  
Gas  
Heavy Equipment  
Mining  
Oil  
Scientific Research  
Security  
Transportation

Drug Enforcement  
Infrastructure  
Military  
Police  
Public Transit

Fishing  
Leisure Craft  
Merchant Shipping



# 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



### 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

### So, what's in the GSatMicro X Series?

The options are highly versatile and can be controlled based on the requirements of your project.

- |                            |                               |
|----------------------------|-------------------------------|
| ✓ Fully self-contained     | ✓ Rechargeable Battery        |
| ✓ Waterproof               | ✓ Omni-Directional Antenna    |
| ✓ Rugged case (IP67)       | ✓ Multiple Sensor I/Os        |
| ✓ Small size               | ✓ Smartphone Tethering & Apps |
| ✓ Status indicators        | ✓ White label Options         |
| ✓ Alert Button             | + Network Redundancy          |
| ✓ Sleep & Storage Modes    | + Increase Coverage           |
| + Satellite + GSM Networks | + Reduce Costs                |
| + Customizable Switchover  |                               |

