

GSatMicro OEM

Create powerful new solutions.



Satellite Enable Your Product

An intelligent, Iridium-based platform for integrating into custom hardware to create satellite enabled solutions.

What is the GSatMicro OEM?

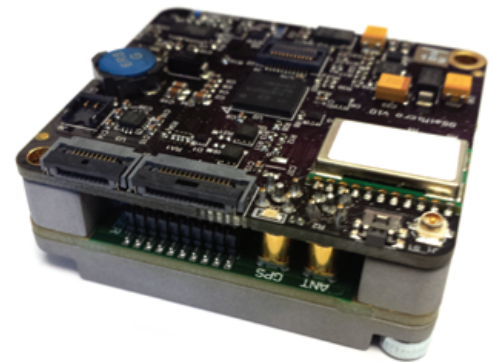
The GSatMicro OEM is an incredibly customizable device which combines telematics and onboard intelligence in a way no other satellite device has before. Starting with an engineering challenge to design the smallest possible satellite tracking device, the GSatMicro OEM not only delivers, it includes extremely advanced functionality in an astonishingly small package.

Completely Customizable Telemetry Device

The GSatMicro OEM allows the ability to satellite enable unique projects to solve or develop strategic missions. It performs as a completely customizable telemetry device with multiple I/O ports allowing the ability to tie in a host of sensors capable of truly understanding how things are behaving.

Get Started!

- ✓ Create Unique Terminals
- ✓ Satellite Enable Any Project
- ✓ Completely Integrable
- ✓ Define Your Own Form Factors
- ✓ Quick To Market
- ✓ Built In Control & Functionality
- ✓ Building Block For Endless Applications



 iridium

Markets

Custom Tracking Solutions
Vessel Tracking
Fuel Monitoring & Logistics
Fleet Management
Container Tracking
Security Services
Recreational
M2M & IoT Integrations
Transportation Telematics

Sectors

Aerospace
Enterprise
Government
Maritime

Includes

eLua Scripting Language
Bluetooth 4.0 (BLE)
AES 256-bit Encryption
Latest SIRFstarV GPS
USB & RS232 Interface

For more information, visit: www.gsatmicro.com

GSatMicro

Specification Overview

Small design for greater results

The GSatMicro OEM board clips directly onto the Iridium 9602 modem providing a platform for developers to integrate into their own projects. Every component of the GSatMicro OEM was designed to fit into a dense vertical stack, providing extremely advanced functionality in an astonishingly small package. It is capable of being fully integrated into a customized form factor designed to meet specialized demands of any project imaginable.

1) Processor

Using the latest 32 bit ARM Cortex technology, the GSatMicro is both fast and very power efficient. The processor itself consumes only a few microamps when sleeping, and wakes up to full power mode in a millisecond to process high speed data.

2) Bluetooth Module

GSat Micro interfaces with other devices, including Apple and Android-based products through its Bluetooth; allowing two-way communication using the GSatMicro application on iOS.

3) Accelerometer & 4) Magnetic Compass

With its accelerometer and magnetic compass paired with onboard intelligence and I/O technology the GSatMicro eliminates restrictions to position information. Instead, the GSatMicro offers you the freedom to truly understand the behavior of your asset. The GSatMicro lets you control how and why the device is going to report.

5) I/O Ports

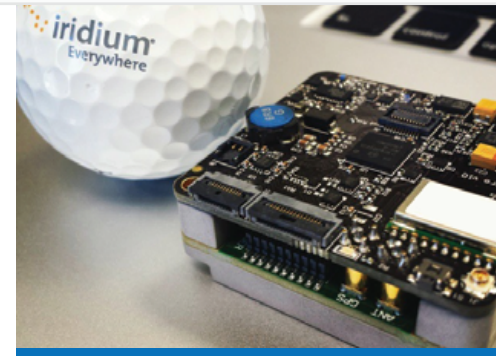
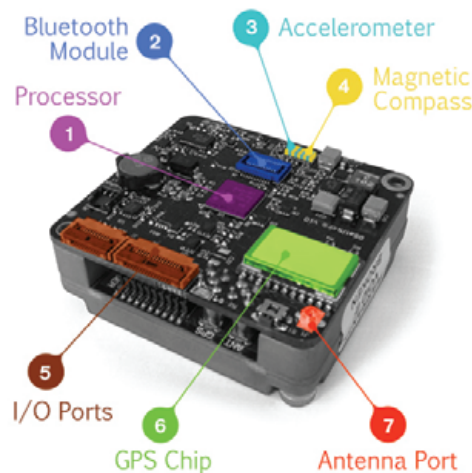
Two flex circuit connectors on the GSatMicro OEM provide all of the I/O functionality and can be easily interfaced to with the I/O Board. The I/O Board provides both common connectors and solderable pins for your project. It includes Micro USB, DB9 RS232, DC power, 2 analog inputs, 2 relay outputs, 5 LEDs, and 3 N/O push buttons.

6) GPS Chip

SiRFstarV GPS with an amazing sensitivity: The GSatMicro is capable of sending and receiving data anywhere in the world, this include positional data such as latitude, longitude and altitude.

7) Antenna Port

Dual band antenna with U.FL/IPEX connector. The GSatMicro uses a shared antenna design to utilize a single antenna for Iridium and GPS connectivity. We have multiple antenna options available including helical or flat ceramic, or integrate your own antenna design.



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

