



# REALM

ENABLEMENT SUITE

## POWER BETTER OPERATIONAL INTELLIGENCE WITH SMART DATA

Globalstar's Realm Enablement Suite opens a new world of hardware and software solutions that redefine how you can rule your data for driving profitability and efficiencies.

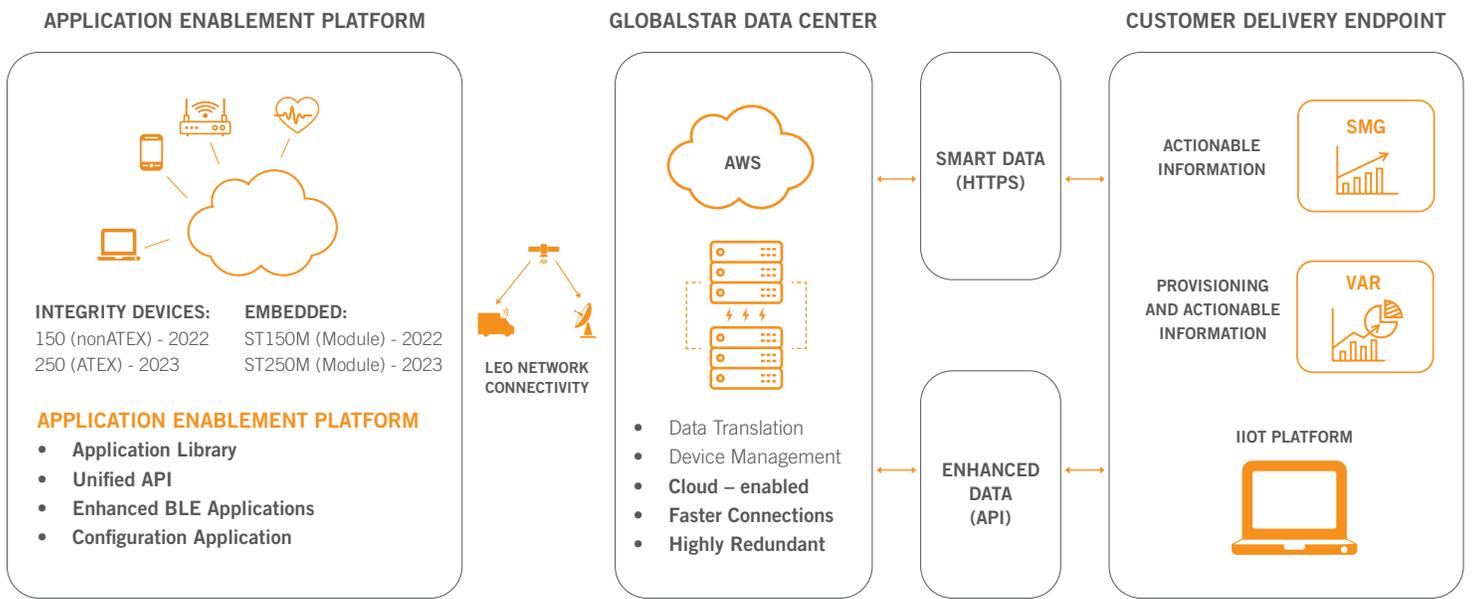
The Realm Enablement Suite is fully available at the edge – giving you a powerful new way to effectively process tracking and sensor data, manage devices, and use existing or create custom AI-enabled applications for driving smart data to your defined telematics and analytics endpoints.

The Realm application enablement platform provides a lower barrier of entry for quickly developing applications that turn data into dynamic operational intelligence. Our Unified API abstracted layer provides centralization and simplification for easy management of all hardware, platform-specific, and value-added edge features.

The platform also serves as an ongoing development ecosystem, with Realm's extensive library of software applications set to expand and evolve as new solutions are added by Globalstar and shared by developers.

Smart data from the edge is transmitted reliably and securely over the Globalstar Satellite Network to the **Globalstar Data Center** and can be delivered to your endpoint.

## GLOBALSTAR REALM



For more information on how Globalstar's advanced product technologies can become an integral part of your wireless solution, visit us online at [www.Globalstar.com](http://www.Globalstar.com). © 2022. All rights reserved.



## REALM ENABLEMENT SUITE

### APPLICATION ENABLEMENT PLATFORM

Tailor our powerful modular software to fit your solution needs

- Uniform Hardware Layer allowing for static Drivers/Hardware Abstraction (HAL)
- Application Layer that can change depending on product
- Security mechanisms for Configuration and Sensor connections that are common to all products
- Industry Supported Language Application BASE C
- Rich Application examples that allow for quick bring-up
- Unsolicited Responses (URC) can be enabled for each module to allow asynchronous notifications of system events through external interfaces, such as the UART
- Security Mechanism for Config/Sensor Connections common to all products

### HEALTH MONITORING

- A new health message option provides additional details on the state and status of your devices.

### MODULAR SOFTWARE STANDARDIZATION

We've lowered the barrier for custom applications with Unified API's. Utilize our assortment of application interfaces for configuring to your specific requirements.

- Modular Library Layer can easily be included/excluded
- Extensive Library of Application Software

Take advantage or supplement the library of solutions that are available in our GitHub environment.

#### 1 APPLICATION LAYER

A new health message option provides additional details on the state and status of your devices.

#### 2 UNIFIED API LAYER

Application program interfaces (APIs) enable your custom applications to immediately access the full capabilities of devices, including sensor support, without additional coding.

#### 3 LIBRARY LAYER

An extensive and growing library of applications can be uploaded to devices in their current form or modified to interface with sensors measuring temperature, humidity, magnetic, angular position, motion, proximity and other metrics. No more writing custom code to control every aspect of hardware operation. We invite all integrators to share their successful modifications or new applications in the GitHub-style library with other Realm integrators.

#### 4 HARDWARE APPLICATION LAYER

Hardware interfaces allow full driver/hardware abstraction within Realm devices to simplify and speed development.



**UNIVERSAL HARDWARE DESIGN**

We've standardized our design to make your integration simple across our suite of products. A large SPI flash provides ample storage for your AI at the edge customized applications.

**INTEGRITY 150**

Solar-powered Asset Tracking Device with Smart Data Processing

Our best Solar product based on the ST150M offering all the capabilities in Realm. The latest power storage technology for a long lasting, no maintenance product with our traditional and enhanced tracking capabilities. Tailor it to your needs with BLE sensors integration and guard your network with enhanced BLE security. If you need more, develop your AI application right on the edge to deliver smart data over the satellite network.

- Standard and Customizable Messaging
- BLE5
- Tamper Detection
- Integrated Accelerometer
- Alternative Reporting
- Change of Location
- Integrated BLE Sensor protocol
- Together with Globastar's new Application Enablement Platform, integration and customization with modular software is at your fingertips



**ST150M**

Most Powerful Satellite Modem Module for Quickly Integrating Vertical-Specific Solution

You'll benefit from the ST150M low power design, which allows you to minimize battery requirements, size, and maximize the green with Solar applications. Its well-established AT command set is conveniently abstracted through our Unified API.

- Globalstar Modem
- GPS Receiver
- Nordic 52840 MCU
- 8MB External Flash
- 3-axis accelerometer
- 24 configurable I/O pins
- Surface mount design
- Integrated voltage regulation
- Integrated BLE Sensor protocol
- Together with Globastar's new Application Enablement Platform, integration and customization with modular software is at your fingertips





## ST150M DEV KIT

Development Kit with Arduino Uno Rev3 Form Factor

The ST150M Development kit is the fastest way to get your product integrated and messaging over the Globalstar Satellite Network. Use Segger Embedded Studio to add custom applications utilizing the Realm Unified API. The support for Arduino shield offers quick hardware integration and protection to the exposed computer and I/O interfaces. The BLE5 implementation and software library allows for swift and secure integration of Bluetooth sensors.

- ST150M mounted on Dev board
- Satellite and GPS patch antenna mounted on Arduino Shield
- Segger Embedded Studio available at no additional cost
- I<sup>2</sup>C shield compatible
- Most I/O pins are available through the shield
- UART is available through the shield
- SPI is available through the shield
- Together with Globastar's new Application Enablement Platform, integration and customization with modular software is at your fingertips



## GLOBALSTAR DATA CENTER

### ENHANCED SUBSCRIBER MANAGEMENT

We have new roles such as Admin and Customer levels. We also offer VAR customer profiles where you can manage what users can access devices in specific subgroups.

### SIMPLIFIED DEVICE MANAGEMENT

- Our API interface has been extended to search owned active and idle inventory
- Transfer idle inventory to other VAR accounts and validate activations or transfer lists of devices
- Manage device groupings by subgroups