

Note: specification subject to change



# RockFLEET Assured

RockFLEET Assured is a compact, marine-grade smart antenna that delivers trusted position reporting and two way satellite messaging worldwide. It integrates the Iridium PNT module to support assured positioning (A-PNT) workflows and uses Iridium Messaging Transport (IMT) to enable routine position reports.

Supplied with a marine-grade cable of up to 100 m length for flexible installation, RockFLEET Assured is available with an optional backup battery to continue tracking and reporting if vessel power is interrupted.

## Key Features

### Assured Positioning (A-PNT) via Iridium PNT

Authenticated position source for trusted vessel position reporting in areas where GNSS is unreliable, spoofed or jammed.

### Chart View (bridge situational awareness)

Nautical chart display showing assured position alongside GNSS position / track with clear status indicators.

### Integrity Alerts

Configurable alerts and event logs when position integrity is at risk, shown locally and optionally forwarded to shore.

### Two Way Messaging via Iridium Messaging Transport

For position + configurable data payloads (telemetry, status, events).

### Configurable Reporting

Scheduled, event-driven, and exception reporting with intervals from 1/min to 1/hour; reporting profiles and all configuration can be updated OTA.

### Geofencing & Alerting

Entry / exit alerts with rule-based monitoring for security and operational workflows.

### Power Cut Resilience (optional)

With backup battery for continued tracking / reporting during vessel power interruption.

### Simple Installation (all-in-one antenna + up to 100 m cable)

Single above-deck terminal - no below-deck electronics required unless bridge view is used - with marine cable up to 100 m for flexible routing.

## Physical & Environmental

<b>Form Factor</b>	Low profile antenna (deck or pole mounted)
<b>Cable</b>	Up to 100m marine-grade cable
<b>Dimensions</b>	201 mm diameter, 125 mm height
<b>Weight</b>	1,460 g (antenna + mounting bracket)
<b>Environmental</b>	IP67
<b>Operating Temp</b>	-40C to +70C

## Communications

<b>IMT</b>	Data transfer packet size flexible from 25 to 100,000 bytes
<b>A-PNT</b>	Integrated Iridium PNT module
<b>Supported Messages</b>	Position reports, alerts (geofence / power / tamper as configured), and additional operational payloads (size / rate profile configurable)

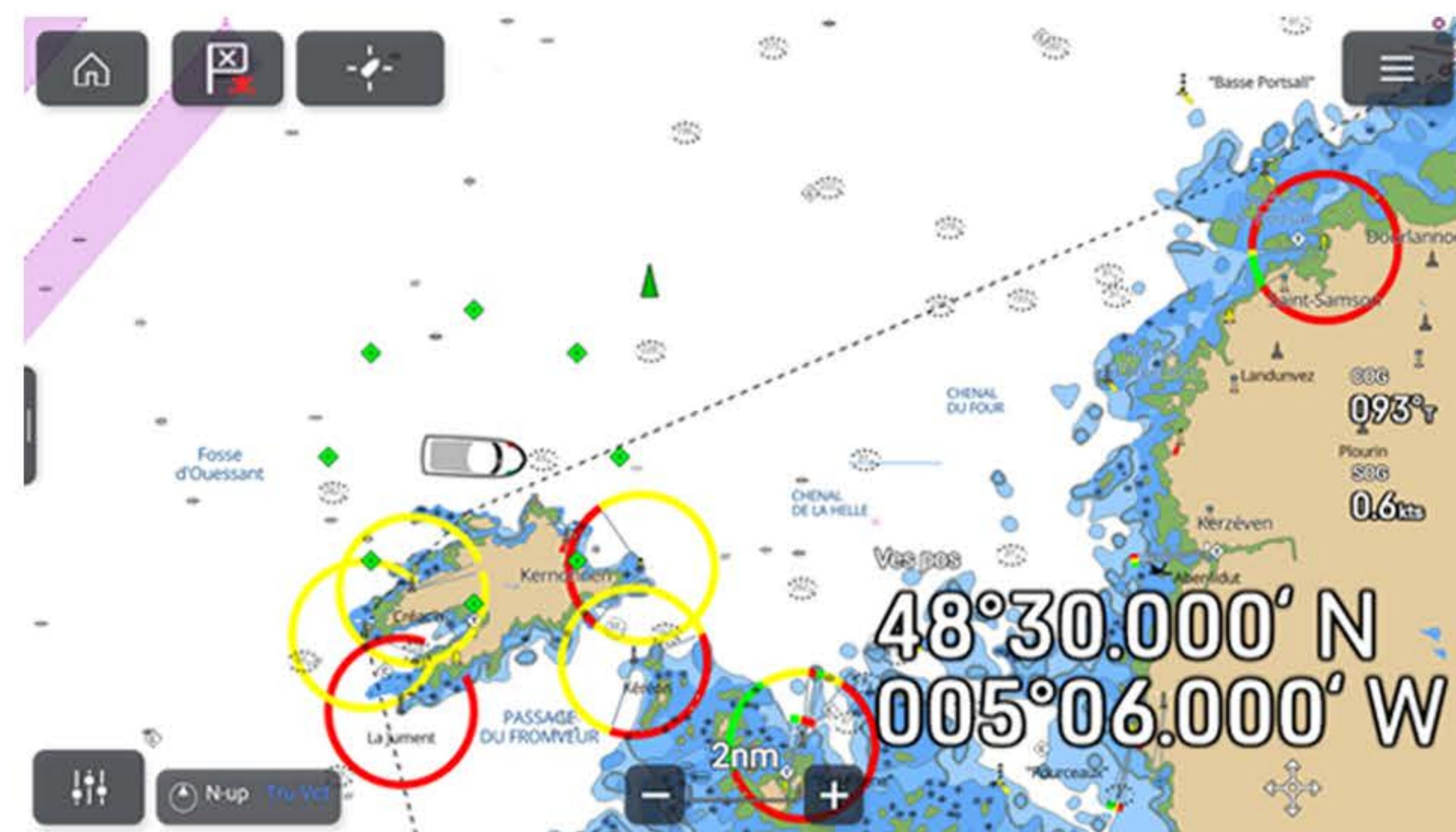
## User Interface & Device Management

<b>Mobile App (Bluetooth LE)</b>	Configuration, commissioning, and status reporting, including position and message / connection state
<b>Local Alerts</b>	Status and fault reporting via the app and remote notifications to shore systems (configuration dependent)

## Electrical Power

<b>DC Input</b>	10 V to 30 V DC (Cable 0-20 m) 20 V to 30 V DC (Cable 21-100 m)
<b>AC Input (optional)</b>	220 V AC via external power supply (kit / integration dependent)
<b>Backup Battery (optional)</b>	Internal battery option for continued operation during power interruption (autonomy depends on reporting profile)

Dynamic position accuracy varies by latitude, with better accuracy nearer the poles where Iridium satellites are closer together. Real world tests show median accuracy of 25m in Norway at 69°N, with 95% under 50m, and 42m in the Red Sea at 19°N, with 97.5% under 200m.

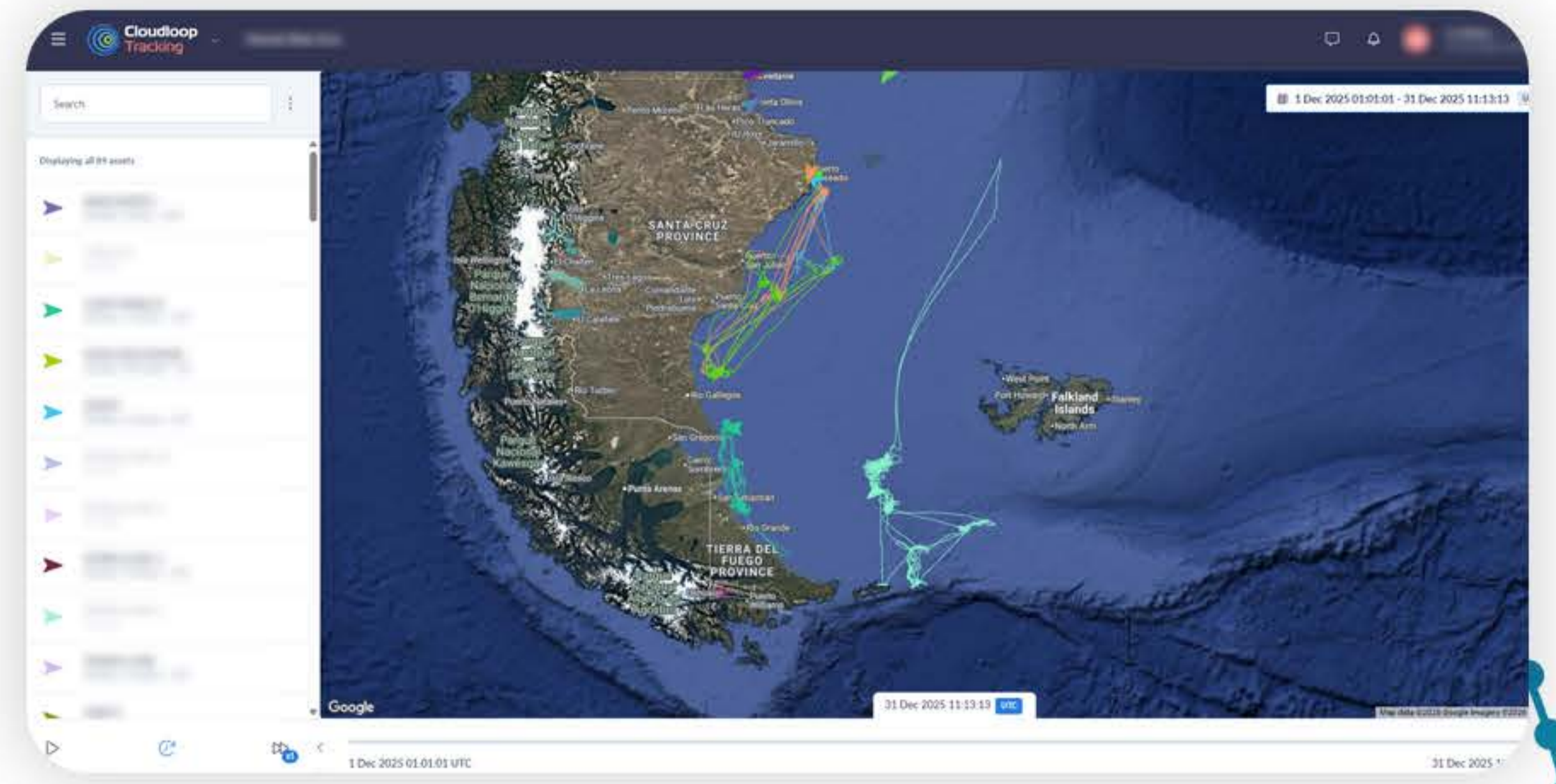


Above: The APNT position (the boat) compared to the GNSS position (the green triangle) which may be spoofed. The circle of green dots indicates the current EPE (Estimated Position Error) of the APNT signal.

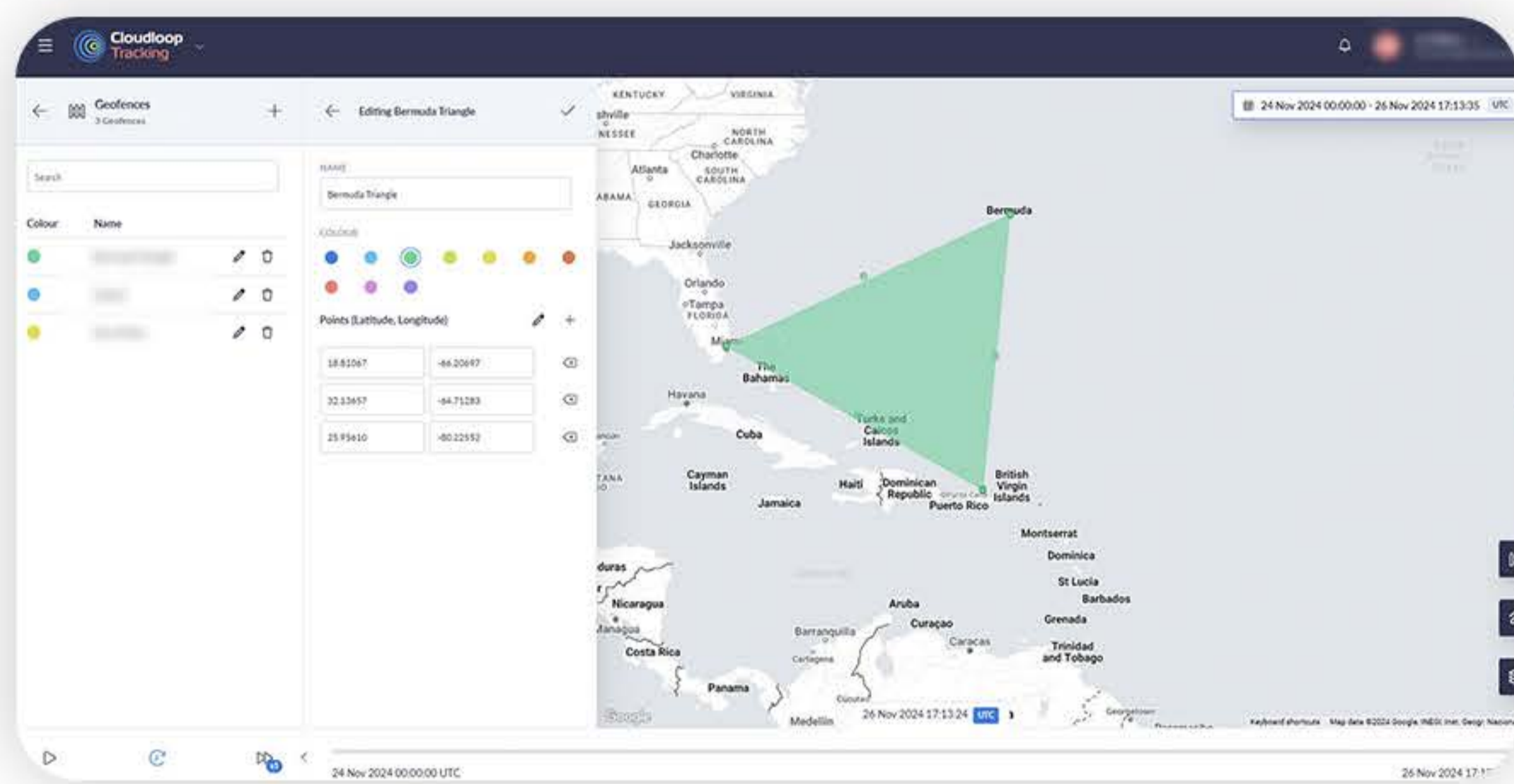
# Cloud Services: Cloudloop Tracking

**RockFLEET Assured connects seamlessly into Cloudloop Tracking, Ground Control's secure, browser-based tracking service for monitoring vessels and mobile assets worldwide.**

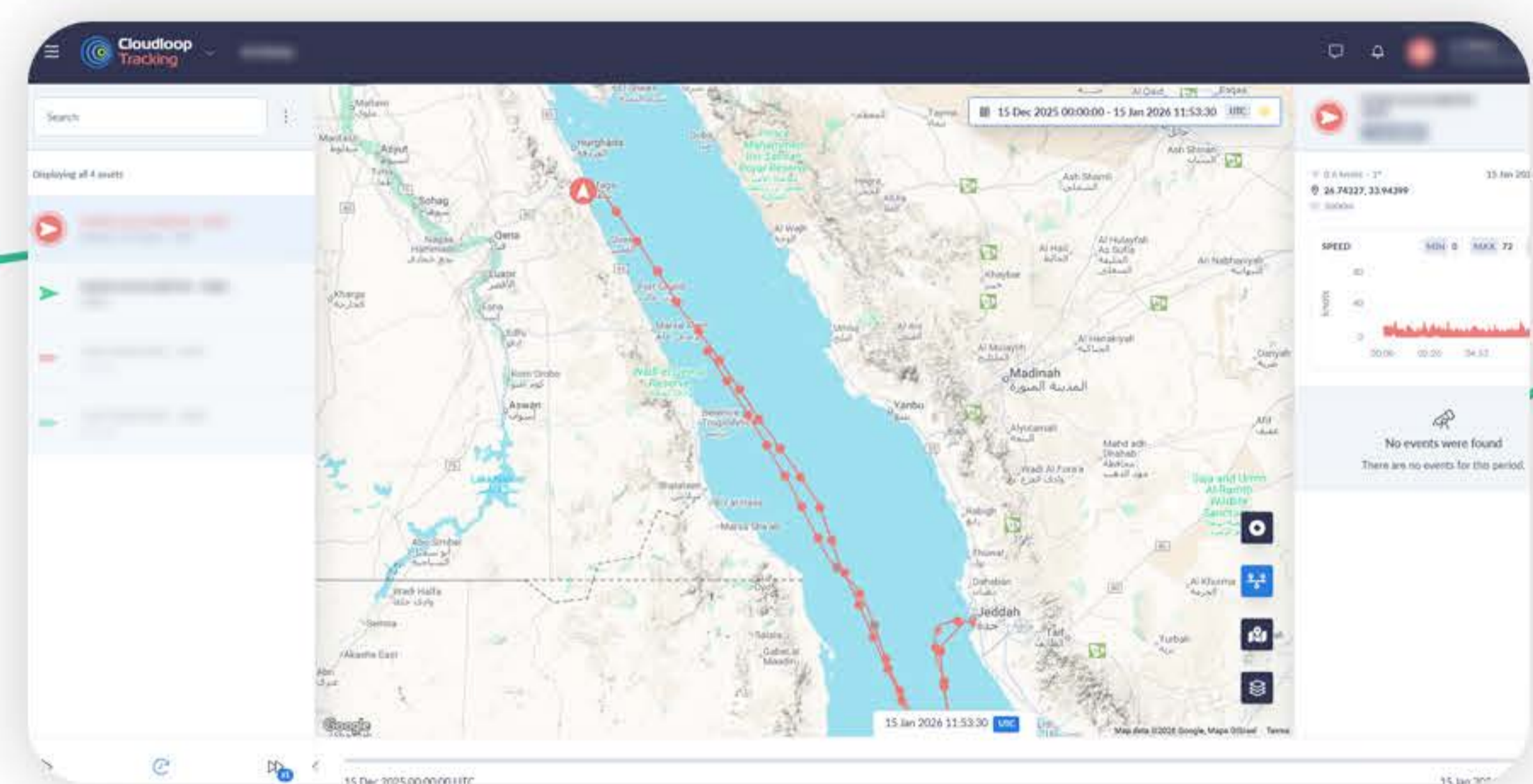
Cloudloop Tracking provides a view of your fleet in real time, with fast access to current position, recent movements, device status, and alerts, ideal for maritime operations that need trusted location awareness across wide areas.



Live map view of one vessel or an entire fleet, with real time and historical location and movement context



Geofences and alerts to highlight key events (e.g., zone transitions, integrity events, power interruption, operational alarms)



A single place to monitor and manage deployed devices and teams globally

## APIs and Data Delivery to Your Platform

Cloudloop is API-first; anything you can do in the user interface can also be done programmatically.

This makes it easy to embed RockFLEET Assured location and event data directly into your own platform and workflows.

Integration options include:

- Push delivery: Stream messages to your systems via HTTP webhooks, MQTT, and common cloud destinations (e.g., AWS, Azure, Google Cloud) for automated processing and routing
- Pull via API: Retrieve messages and events on demand using REST endpoints (including long-poll where appropriate)
- Consistent data format: Messages are provided in a structured JSON format with useful metadata, simplifying integration regardless of destination