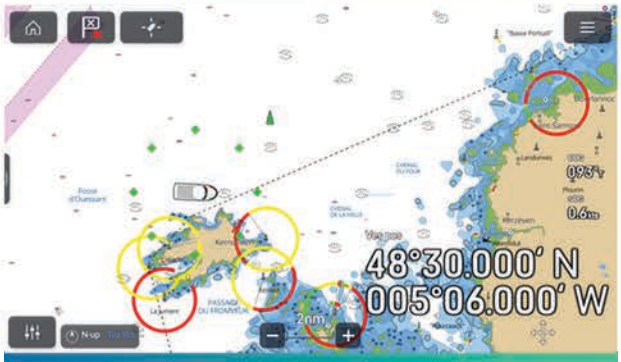
RockFLEET Assured

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.



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.

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

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

Communications

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

User Interface & Device Management

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

Electrical Power

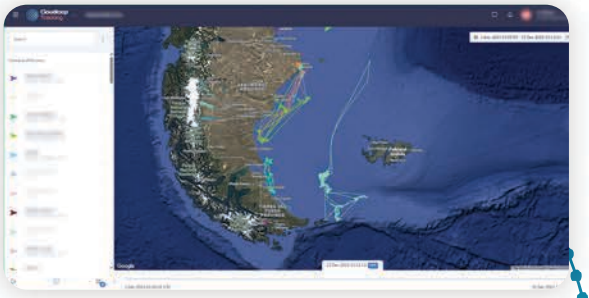
DC Input	10 V to 30 V DC (Cable 0-20 m) 20 V to 30 V DC (Cable 21-100 m)
AC Input (optional)	220 V AC via external power supply (kit / integration dependent)
Backup Battery (optional)	Internal battery option for continued operation during power interruption (autonomy depends on reporting profile)

Note: specification subject to change

Cloud Services: Cloudloop Tracking

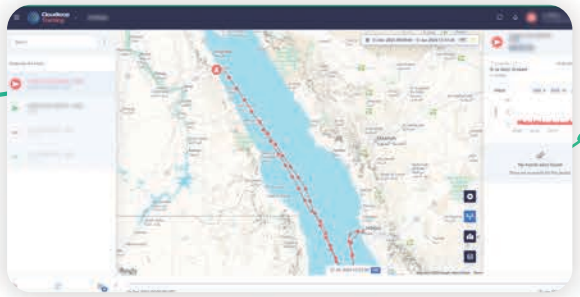
RockFLEET Assured connects seamlessly into Cloudloop Tracking, Ground Control's secure, browser-based tracking service for monitoring vessels and mobile assets worldwide.

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

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