

RockFLEET Assured

Independent vessel position assurance when GNSS cannot be trusted



RockFLEET Assured is a marine grade system that provides an independent Iridium PNT tracked position source alongside standard GNSS. The Iridium PNT signal is 1,000 times stronger than standard GPS/GNSS signals, and provides proven resiliency in GNSS spoofed or jammed environments. Using the RockFLEET Assured enables a comparative positioning for trace and verification of your true maritime position.

The system combines a battery-backed above-deck unit incorporating Iridium Messaging Transport (IMT) as well as the two position sources. It operates with a below-deck chart plotter display, giving bridge teams a clear comparison between GNSS and assured Iridium PNT positions. Situational tracking data is fully configurable, and can be delivered to operation centers via our Cloudloop tracking platform, or integrated via API direct to your own system.

It supports trusted position reporting, device status monitoring, integrity alerts and operational visibility for bridge teams and shore-based fleet operators navigating in contested waters.

BENEFITS

- For Bridge Awareness:**
 Chart plotter provides clear comparison of GNSS and A-PNT positions for situational reliability.
- For Incident Review:**
 Independent position and event records that support post event analysis.
- For Fleet Visibility:**
 Monitor vessel movements, device status and alert teams across a wide operating area.
- Flexible Integration:**
 Structured data can be routed into fleet, compliance and operational platforms.

KEY FEATURES

Assured Positioning via Iridium PNT

Independent A-PNT position source for trusted vessel position reporting when GNSS is unreliable, spoofed or jammed.

Chart View for Bridge Awareness

Chart plotter display showing Iridium PNT position alongside GNSS position, with track and status indicators.

Integrity Alerts on GNSS position

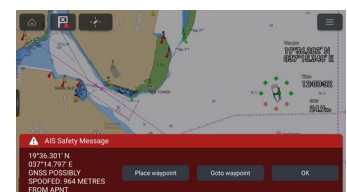
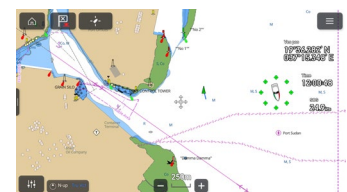
Configurable alerts and event logs highlight position integrity risks locally and can be forwarded to shore (feature in development).

Flexible Installation Options

- Single above-deck unit with marine-grade cable up to 100 m, plus a PowerHub for straightforward, plug-and-play installation.
- Supports both NMEA 2000 and NMEA 0183, and can be self-installed without a satellite communications specialist.

Insurance, Compliance and Auditing

Event records support post incident review, compliance evidence and insurance reporting when GNSS integrity is questioned.



Accuracy note: Dynamic position accuracy varies by latitude and satellite geometry. Real world tests have shown median accuracy of 25 m in Norway at 69°N, with 95% under 50 m, and 42 m in the Red Sea at 19°N, with 97.5% under 200 m. *Specification subject to change.*

TECHNICAL SPECIFICATION

PHYSICAL AND ENVIRONMENTAL

Form Factor	Low profile, marine-grade smart antenna for deck or pole mounting
Size	201 mm diameter x 125 mm height
Weight	1,460 g, including antenna and mounting bracket
Iridium Transceiver	9704 modem
Environmental	IP67
Operating Temperature	-40°C to +70°C
Cable	Marine grade cable, available up to 100 m

ELECTRICAL POWER

Power Input/Output	Powered by vessel DC supply
Voltage Required	ADU 15V to 24V DC (Cable 0-100m) BDU 10V to 30V DC
AC Input	220 V AC via external power supply, kit / integration dependent

CONNECTIVITY AND DATA INTERFACES

Iridium IMT	Two way satellite messaging for one minute to 60 minute reporting
Bridge Data Feed	NMEA 2000 and/or NMEA 0183 output for integration with bridge systems
Bluetooth LE	Local commissioning, configuration and device status via the mobile app
Configurable Reporting	Position, integrity, geofence, power & tamper events, depending on config.

USER INTERFACE AND DEVICE MANAGEMENT

Mobile App	Bluetooth LE app for commissioning, configuration and status reporting
Remote Configuration	Configuration of device, key parameters and reporting profiles using Cloudloop Device Manager
App Messaging	Device, position and message or connection state available via the app.
Cloudloop Platform	Manage data, tracking, alerts, telemetry, reporting and multiple user accounts remotely, or integrate all functional API into own systems

CHART PLOTTER (BDU) AND CABLE

Visible Position Check



Raymarine Axiom+ 9 chart plotter for bridge situational awareness.

Supplied with the required Raymarine NMEA cable for connection to the bridge display.

Displays assured A-PNT position alongside GNSS position, helping bridge teams compare trusted and conventional position sources.



Further information
on
RockFLEET Assured

Order Reference:

RockFLEET Assured Full Bundle
RockFLEET Assured (NMEA 2000)
RockFLEET Assured (NMEA 0183)

FP-GC-RFA-FB
FP-GC-RFA-B
FP-GC-RFA0183-B