



NextSense Vessel Intelligence System

Smart Monitoring for Modern Maritime Operations

Gain complete visibility into fuel consumption, vessel performance, engine health, and fleet operations through a unified Industrial IoT platform.



Reduce
Fuel
Consumption



Prevent
Fuel Loss
& Theft



Monitor
Engine
Performance



Improve
Operational
Efficiency



Increase
Fleet
Visibility



Real-Time Monitoring



Reliable Connectivity



Smart Analytics



Actionable Insights

Challenges in Maritime Operations

Maritime operators face increasing pressure to improve operational efficiency while controlling fuel costs and maintaining vessel reliability.



ALERTS

- ⚠ High Fuel Consumption
- ⚠ Fuel Transfer Detected
- ⚠ Engine Alarm
- ⚠ Low Tank Level

ENGINE HEALTH



01
Fuel Consumption
Uncertainty



02
Fuel Theft
& Losses



03
Limited Vessel
Visibility



04
Manual
Reporting



05
Engine Reliability
Risks



06
Rising Operating
Costs

THE IMPACT
TO YOUR BUSINESS



Higher
Operating
Costs



Reduced
Operational
Efficiency



Increased
Operational
Risk



Delayed
Decision
Making



Lower Fleet
Performance &
Profitability

What is Vessel Intelligence System?



An Industrial IoT platform that connects your vessel, sensors, and operations into one intelligent dashboard.



Monitor Everything That Matters



Fuel Consumption



Fuel Tank Levels



Main Engine Parameters



Auxiliary Engine Parameters



Generator Performance



GPS Location



Voyage Data



Fleet Status



Environmental Data



Operational Events



Connect
Sensors & Devices



Monitor
In Real-Time



Analyze
With Smart Analytics



Act
With Intelligence



Better Decisions
Better Efficiency

Key Capabilities



Real-Time Fuel Monitoring



Monitor:

-  Daily Tank Level
-  Storage Tank Level
-  Fuel Consumption
-  Fuel Transfer
-  Fuel Refueling Activities

Benefits:

- ✓ Fuel Visibility
- ✓ Fuel Loss Detection
- ✓ Improved Fuel Accountability



Engine Monitoring



Monitor:

-  RPM
-  Oil Pressure
-  Coolant Temperature
-  Battery Voltage
-  Running Hours

Benefits:

- ✓ Early Fault Detection
- ✓ Improved Reliability
- ✓ Reduced Downtime



Fleet Tracking & Visibility



Monitor:

-  Vessel Location
-  Route History
-  Voyage Analytics
-  Fleet Status

Benefits:

- ✓ Fleet Visibility
- ✓ Operational Awareness
- ✓ Better Decision Making



Alarm & Notification



Receive alerts for:

-  Low Fuel Level
-  Abnormal Fuel Consumption
-  Engine Fault Conditions
-  Sensor Failures
-  Communication Failures

Benefits:

- ✓ Faster Response
- ✓ Reduced Operational Risk

End-to-End Vessel Monitoring Architecture



1 Sensors & Field Devices



Fuel Level Sensors



Flow Meters



Engine Sensors



GPS Devices

2 NextSense Marine Gateway



3 Connectivity



4G / LTE



VSAT



Iridium Satellite (LEO)

4 NextSense Cloud Platform



5 Applications & Insights



Dashboard



Analytics



Reports



Alerts



AI Insights

Operational Intelligence Dashboard

Monitor all vessels from a centralized platform.



Deliver **Measurable Results**



Reduce Fuel Costs

Improve fuel accountability and identify abnormal consumption.



Improve Operational Efficiency

Access real-time vessel performance information from anywhere.



Prevent Fuel Losses

Detect unusual fuel transfers and inventory discrepancies.



Improve Reliability

Monitor engine conditions and respond proactively.



Enhance Fleet Visibility

Gain a complete view of vessel operations across the fleet.



Why Choose NextSense?



Maritime-Focused Solution

Designed specifically for vessel operations.



Industrial IoT Platform

Built using proven industrial-grade technologies.



Flexible Connectivity

Supports LTE, VSAT, and Satellite communication.



LTE



VSAT



Satellite



Scalable Architecture

From a single vessel to an entire fleet.

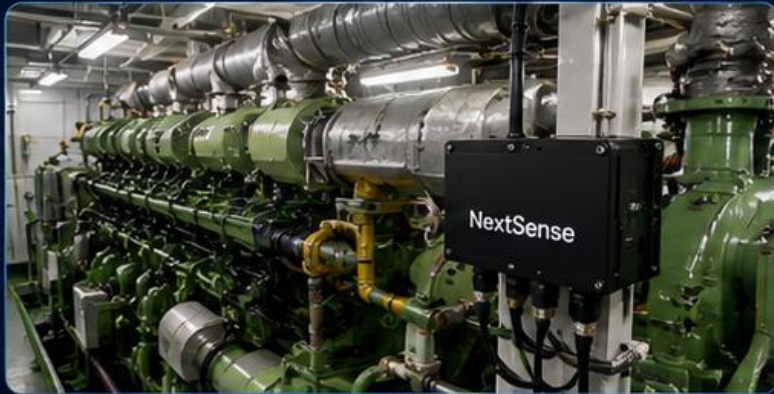


Real-Time Intelligence

Transform operational data into actionable insights.



Proven Across Multiple Maritime Operations



**Fuel
Monitoring**



**Fleet
Monitoring**



**Engine
Monitoring**



**Remote Vessel
Operations**

Ready to Modernize Your Fleet?

Discover how NextSense Vessel Intelligence System can help improve operational efficiency, reduce fuel costs, and enhance fleet visibility.



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Improve Efficiency



Reduce Fuel Costs



Enhance Visibility



Increase Reliability

