

IMAS® gives operators the tools to modernize their fleet operations, monitoring and management

Hefring Marine IMAS leverages AI, sensor data, and edge computing to provide real time decision-support to optimize vessel operations to enhance comfort and safety, fuel efficiency and vessel sustainability, while centralizing all vessel data to simplify monitoring, analytics and reporting.





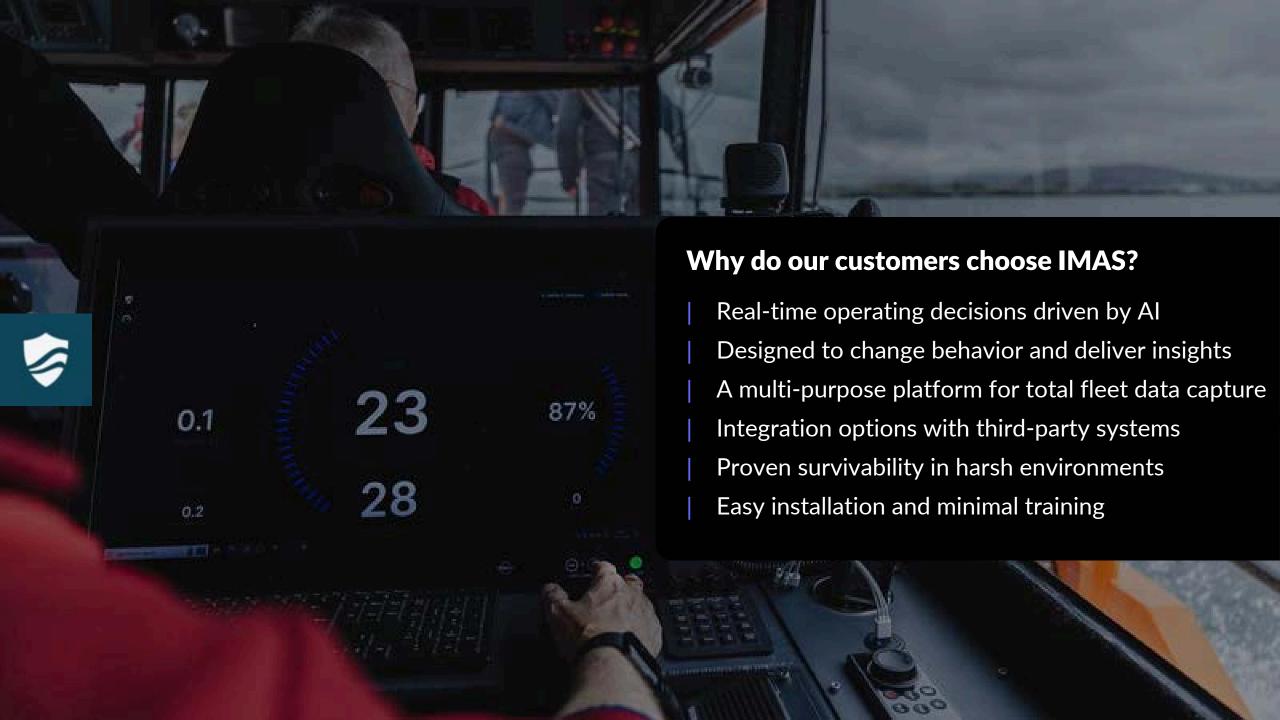
Up to: | 20% lower fuel use and emissions

87% lower wave impact exposure

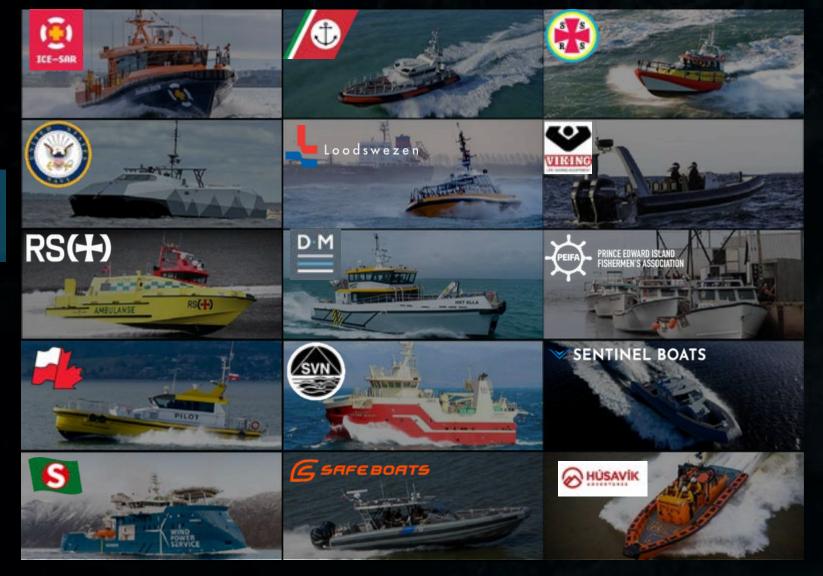
20% insurance premium savings

Link to video

Patented internationally



IMAS® is in use by many professional customers, who have validated the solution in the harshest conditions



~98,000 hours logged

~1,010,000
nautical miles sailed

~4,500 trips monthly

Rescue, defense, crew transfer, law enforcement fisheries, pilotage, diving.



IMAS® is a data collection and analysis platform for marine vessels, built to thrive in the toughest environments





IMAS Cloud for data collection. IMAS is also available fully offline.

IMAS Console is a cloud platform for monitoring and analytics, providing operators and managers with advanced tools for efficient vessel fleet management. Available as desktop and mobile applications.



IMAS Helm, onboard Al-driven software, with Ul compatible with all main display brands.

IMAS Hardware is a rugged, MIL-STD central computer for data processing, and sensors (IMUs) for motion capture andsea condition analysis.

IMAS® Safety Speed predicts conditions and vessel motions for adaptive speed control to ensure onboard safety





Reduce damage and incident risks with IMAS® Helm Safety Speed, providing real-time condition-adaptive speed limit predictions from on-board condition-adaptive sensory feedback.

- 1. Real-time impact & shock exposure
- 2. Highest recorded trip impact
- 3. Number of impacts above threshold
- 4. Actual vessel speed, Speed over ground
- 5. SafetySpeed, to limit impact exposure
- Trip safety score

Effects of IMAS® Helm SafetySpeed, verified over 330,000 nautical miles of collected data

87%



<1%

Impact reduction
achieved when operating
within ±5% of
SafetySpeed versus
operating above it

Consequent average reduction in trip speed

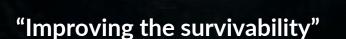
Over 330,000 nautical miles of IMAS data analyzed, demonstrating a significant impact reduction when IMAS Safety Speed is followed, despite only a slight reduction in average speed.

While IMAS® can monitor and predict wave impacts, it will soon be capable of alerting for impacts with physical objects





Upcoming feature for collision and grounding warnings and alerts, notifying operator or observer if vessel has an impact with a physical object.





With IMAS® every trip can be explored with a visual Impact Report

Impact Reports in the IMAS Console provide unprecedented insight into vessel impact events — helping to identify what happened, where it occurred, and how to prevent it in the future.



The view allows:

- Determining the hull location of each impact
- Seeing the direction of each impact
- Analyzing the magnitude, duration, and location of each event



Impact Reports were built to uncover risks, improve operational safety, and provide deeper visibility into fleet performance.

"Improving operational safety"

IMAS® EcoSpeed learns your vessel's operational profile and identifies its optimum efficiency range in real time



IMAS® Helm Eco Speed, can optimize fuel use or available range, dynamically predicting a prevailing fuel curve, speed & RPM, continuously adapting to each vessel and conditions & continuously improving.

- Actual per nmi fuel consumption
- Surplus fuel savings vs. vessel average
- Avg. consumption and actual fuel flow
- Target fuel rate, set by fleet manager
- Predicted fuel consumption curve
- EcoSpeed/RPM, fuel efficiency ranges





IMAS® Console provides powerful tools to monitor and analyse a fleet, helping operators stay informed at all times

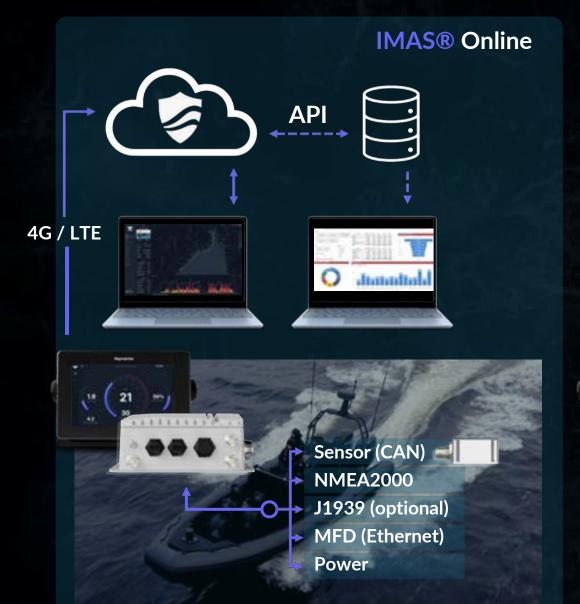


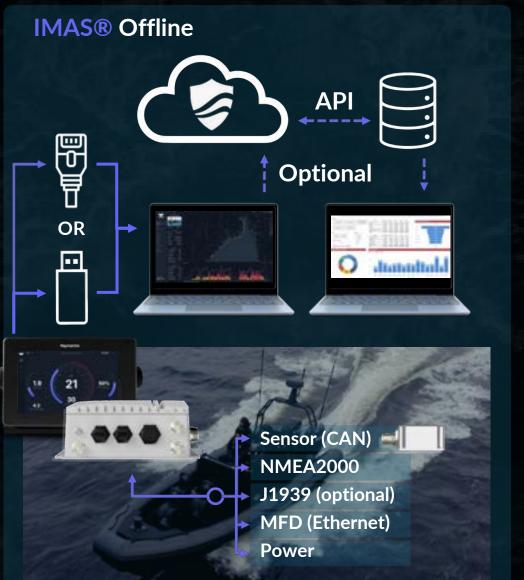
IMAS Console is a vessel fleet monitoring and analytics platform, designed to empower vessel owners, operators, and managers with advanced tools for efficient vessel fleet management, real-time monitoring, and data-driven decisions.

- Live Fleet Monitoring and Tracking
- | Historical Records for Inspections
- Asset and Equipment Monitoring
- | Fleet Information Dashboard
- Automated Trip Logs & Analytics
- Operator and Vessel Profiles and Scores
- Virtual Fleet Manager and Alerts
- Upcoming: Route planner and optimizer



IMAS® System variant options: Online and Offline







TRUSTED BY THE TOUGHEST PROFESSIONALS



In Norse mythology, the sea giant Ægir and the sea goddess Rán had nine daughters, each representing a type of wave. Some daughters' names persist in modern Icelandic as both female names and wave terms. One daughter embodied the 'rising wave,' the sea's dynamic power. Her name was **HEFRING**.

hefringmarine.com