ENIRAM PLATFORM

UNDERSTANDING YOUR SHIP'S DNA

Optimizing ship performance is a key method for shipping companies to combat rising fuel prices while keeping pace with environmentally-friendly best practices. By collecting and analyzing critical onboard KPI data, shipowners and operators can continually grow vessel and fleet intelligence in order to improve fuel efficiency and remain competitive Eniram's 4th generation Eniram Platform™ gives the shipping industry a foundation to optimize the performance of their vessels.

COLLECT DATA, SAVE MONEY

Eniram Platform is a real-time data collection platform that measures vessel performance and fuel consumption. Eniram Platform collects data from onboard bridge and automation systems and complements this with data from Eniram Sensors. This data is then stored to Eniram data center for future references, further analysis and complex modelling.

Eniram Platform can be integrated into virtually all third party vendor technologies. Direct integration eliminates the chance of human error or deliberate misreporting of critical vessel information. We then filter, log and analyze the collected data to provide the base for our products:

- Eniram Trim™
- Eniram Speed™
- Eniram Engine™
- Eniram Fleet™
- Eniram Performance™

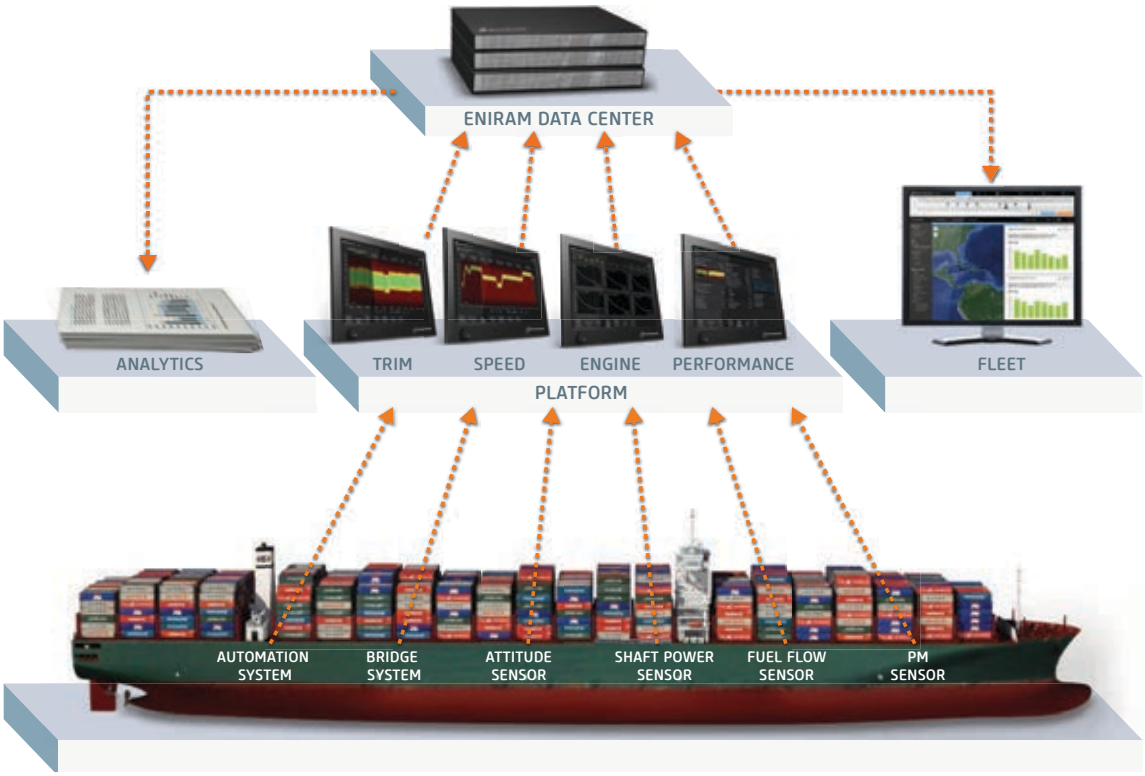
The data collected with Eniram Platform helps build a profile of how you can operate your vessel more efficiently. You can also get insight into other areas, like the effects of hull fouling and when it is time to clean the hull with the help of our Analytics Services.

ENIRAM PLATFORM 4 FEATURING

With this next generation vessel platform, we are taking key vessel performance measurements, based on real-time data, to deeper layers of integration and visualization. The new platform benefits customer vessel operations with:

- High quality data from more sources
- Improved optimization for accurate fuel savings
- Platform for speed and engine management
- Improved visualization (trim, list, speed, engine) including highly visual dashboard
- Supports multiple screens, e.g. on bridge and ECR.

They trust Eniram: NCL Norwegian Cruise Line · Hamburg Süd · Destination Gotland · Phoenix Reisen · Carnival · MTM · Hapag-Lloyd · Norgas · Royal Caribbean International · Silversea · Color Line



TECHNICAL SPECIFICATIONS

ENIRAM HARDWARE

- Eniram System Cabinet
- Eniram Data Server
- Eniram Display Server
- Eniram Attitude Sensors

INTEGRATION

A number of data sources can be integrated with Eniram Platform to record the desired variables, such as:

- Location
- Heading
- Speed through water
- Propulsion power
- Engine output power
- Propeller RPM
- Draft
- Forecast data
- Wind speed and direction

The default installation includes integration to Integrated Automation System (IAS) and Integrated Bridge System (IBS) which covers most of the variables listed above. Other common integration points are weather stations, speed logs, GPS, and propulsion measurement systems.

SUPPORTED HARDWARE INCLUDE:

- RS232
- RS422
- RS485
- Ethernet
- Process inputs: 0..20mA, 4..20mA, 0..5V, 0..10V, -10..10V, -100..100mV, Pt100, Pt500

SUPPORTED PROTOCOLS INCLUDE:

- NMEA 0183
- MODBUS & MODBUS/TCP
- 3964R
- Proprietary ASCII protocols
- Proprietary binary protocols

ABOUT ENIRAM

Established in 2005 by experienced seafarers and technologists, Eniram provides the maritime industry with energy management systems to reduce fuel consumption and emissions. Using our products combined, shipping companies can save up-to 10% of fuel per vessel, and get 100% visibility into fuel consumption.

ENIRAM

Itälahdenkatu 22a
FI-00210 Helsinki, FINLAND

Tel: +358 10 843 3800
Fax: +358 10 843 3999

info@eniram.fi
www.eniram.fi