



OPERATIONS+ ENERGY OPTIMISER

Helps Maximizing Operational and Energy Efficiency with minimum emissions as a result of real time feedback using operational key performance indicators (KPIs) including advisories for timely and targeted on-site actions.

How can we help?

As part of the **Operations+** offering, the Energy Optimiser solution of Power Conversion, a business of GE Vernova unlocks greater efficiency in operations performance and energy efficiency

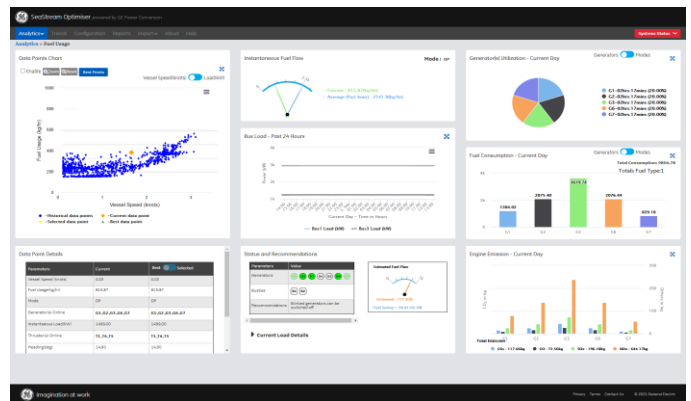
Minimize the energy footprint when fuel consumption and emissions are reduced as a result of an optimized system configuration. Several factors have impact on the fuel consumption and associated emissions.

When comparing current vessel status to historical operating states, profiling similar speed, system load and weather conditions, the optimum system configuration can be determined, enabling real-time decisions on how best to operate the power system.

- Suitable for any marine applications, but in particular for those with high fuel and energy usage.
- Help to achieve cleaner operations and reduce operational expenditure.
- Provide insights for the IMO reporting.

What is the Value of the Solution?

- Reduces cost of engine maintenance due to reduction of running hours and more efficiently
- Enable informed decision making to operate the power system, and savings on fuel cost without compromising on the efficiency of the journey



What is the impact on Environment and associated regulations?

- Provide insights for the IMO reporting
- Transparent reporting to owners, operators, stakeholders and government entities.
- Monitor Sulphur Oxide (SO_x) - water mass pollutant-, and other emissions, and provide recommendations to optimize the system configuration to reduce fuel consumption and therefore minimize emissions.



Energy Optimiser Features

- Integration to Vessel Control and Dynamic Positioning Systems.
- Auto-detection of vessel Operating Mode
- 24x7 Real time visibility of fuel consumption and impact of any system configuration changes on fuel consumption.
- Historical view of fuel consumption and estimated emissions
- Visibility of total energy consumed, running hours of generators, and fuel consumption by fuel type
- Reports on fuel consumption and emissions for selected time and during various operating modes.
- The dashboards can be displayed on the local HMI of the on-prem PC or a larger external monitor.
- Fleet View

Cloud or On-Prem solutions available

Compatibility with Performance (DP) Optimiser and Dynamic Positioning systems

- Energy & Performance (DP) Optimiser are combined into a single app and designed to work seamlessly on vessels with GE's own Vessel Control and Dynamic Positioning Systems, or as a standalone product with any 3rd party vessel control/automation system.

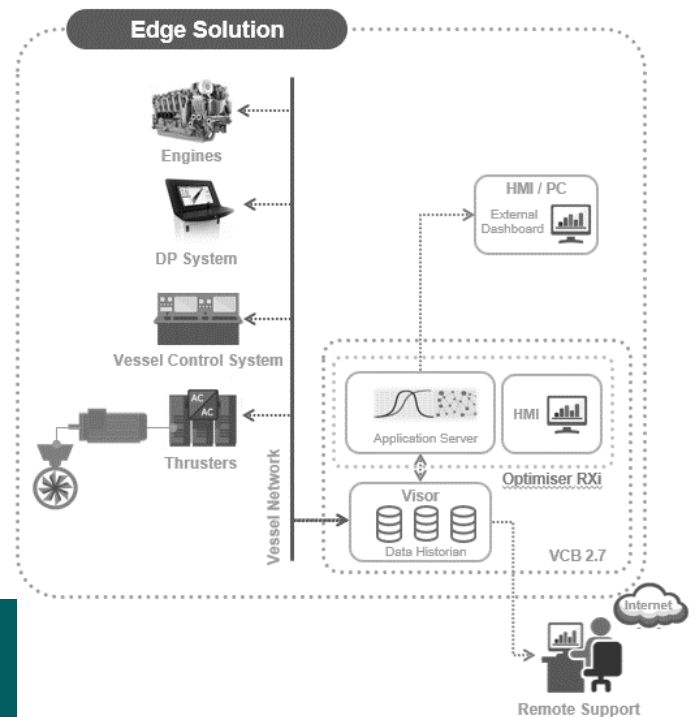
HIGHLIGHTS

SAFE AND FLEXIBLE

- Open interface with third party systems using OPC-UA
- Easy to use On Prem and Cloud dashboards
- Achilles level 1 & IEC62443 – 4-1 Security Certified (through VCB v.2.7+)

General Architecture

Solution available on-prem (edge) PC which performs the analytics and provides insights into the optimum power system configuration. Visor Connect Box (VCB) is used to safely and securely collect data from the vessel's DP or automation and control system. Both the on-prem analytics PC and VCB are packaged in one unit.



CONTACT US

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