

DEC-32U

Diesel Engines Control System

Diesel Engine Control System

The processes are managed in real time using state-of-the-art Programmable Automation Controllers (PAC), which guarantees the execution of deterministic applications, that give a high reliability to the system.

This system can be integrated with other equipment onboard, to exchange data between different instruments, which allows to optimize the integral management of the information.

The system allows the monitoring and control of Diesel Engines for different types of ships, through the execution of maneuvering processes such as Turning, Starting and Stopping the engines.

In order to notify the operator about any eventualities or status of the process variables, the system has touch screen panels where the information is presented graphically, as well as analog indicators where can be monitored the variables needed in case of a fully manual operation.

The components used in the system are commercial (COTS), which guarantees a high level of availability and maintainability of the system.

User interfaces

Allow to visualize the variables monitored, as well as operating the processes of starting and stopping the engines.

Provide a history of alarms and events.

Give a log of the operation hours of each engine.

Allow you to configure specific parameters for certain variables.



Characteristics



Configurable

allowing the monitoring and control analog variables (voltages, currents, temperatures, pressures, etc.) as well as digital signals from various equipment.



Scalable (upgradable)

allowing to integrate for the monitoring of new signals through additional modules and/or to use reserved input/output channels.



Self-managed

with BIST (Built-in Self Test).



Redundant

in electrical power of the equipment, in controllers, touch screens and communications, besides allowing manual operation through analog indicators, which provides a greater reliability and availability of the system.

Technical specifications

Power supply	100V-240V AC @ 60Hz / 90V-300V DC
Operating temperature	-20°C to 60°C
Storage temperature	-30°C to 70°C
Protection grade	IP-65
Monitoring and control equipment	Controller with real-time processing and reprogrammable logic gates array Built-in FPGA (Field Programmable Gate Array).
User interface	Touch screen 15" and 19" *
Connectivity	Communication via serial port (RS-422 / RS-485) with built-in NMEA-0183 protocol, or via network port (Ethernet).
Others	Light and audible indicators as required.

*Optional according to requirement or choice.

System Architecture

