

INGESHIP

PMS

INGESHIP IAS Technical Functions Power Management System



The Power Management System [PMS] is an essential part of the automation and electrical system on marine vessels, especially on those with electrical propulsion. The PMS controls the power system in order to maximize the blackout prevention capabilities and decrease the maintenance costs, achieved through the protection of the equipment against faults and malfunctions.

Power Management System

Blackout prevention

- Precautionary genset start
- De-load before opening generator/bus-tie breakers
- Fast load reduction (analogue power limitation set point to the drives, 100ms response time)
- Configurable blackout recovery
- Advanced load dependant start-stop
- Secured operation (load reservation)

Load control

- Load transfer (for synchronization, deloading and load sharing)
- Load dependant start-stop
- Manual/automatic load control
- Gensets priority selection, manual, dynamic
- Heavy consumers management with pre-programmed sequence

Load sharing

- Load sharing between gensets over the DEIF PMM 300 Network
- Equal load sharing, symmetrical
- Asymmetric load sharing for gensets
- One genset base load with asymmetric load sharing for the other gensets
- Shaft generator base load and asymmetric gensets load sharing
- Shore connection base load and asymmetric gensets load sharing

Bus bar section control

- Configurable power management rules for each section
- Bus-tie and shore connection breakers control
- Active power (kW) load sharing (GOV)
- Load sharing options for each bus bar