

ELECTRIC POWER MONITOR - EPM

REMOTE MONITORING OF POWER GENERATED ONBOARD



- **Constant onboard monitoring of power quality.**
- **Uses existing current and voltage transformers.**
- **Readable comprehensive user interface.**
- **Automatic working hours counter of each generator.**

EPM is a system dedicated to constantly monitor the parameters of electric power plant. It supports efficient operation of generators by providing a vital information for crew and ship-owners. System is able to send data via RS485 port in NMEA format to other mandatory systems such as Automatic Monitoring System or ship efficiency systems such as ESOS.



Electric parameters are measured and calculated separately for each Diesel Generator. EPM provides 3-phase measuring of:

- Voltage [V]
- Current [A]
- Frequency [Hz]
- Active (Real) Power [kW]
- Active (Real) Power referred to nominal [%]
- Reactive Power [kVar]
- Apparent Power [kVA]
- Power Factor [-]
- Produced energy [kWh]
- Running hours counter [h]
- Running hours (total, not resettable) [h]

Additional Information

System is basing on 7-inch LCD HMI (Human - Machine Interface) panel, operated directly by touch screen. User interface is divided into several screens according to system functions.

TECHNICAL SPECIFICATION

Main Unit:

- Display: 7", color, touch screen
- Power supply: 24 VDC

Measuring ranges:

- Voltage L-L RMS: 25 ... 600 VAC
- Current RMS: 10 ... 6 000 A (measuring < 5 A)
- Frequency: 47.0 ... 63.0 Hz

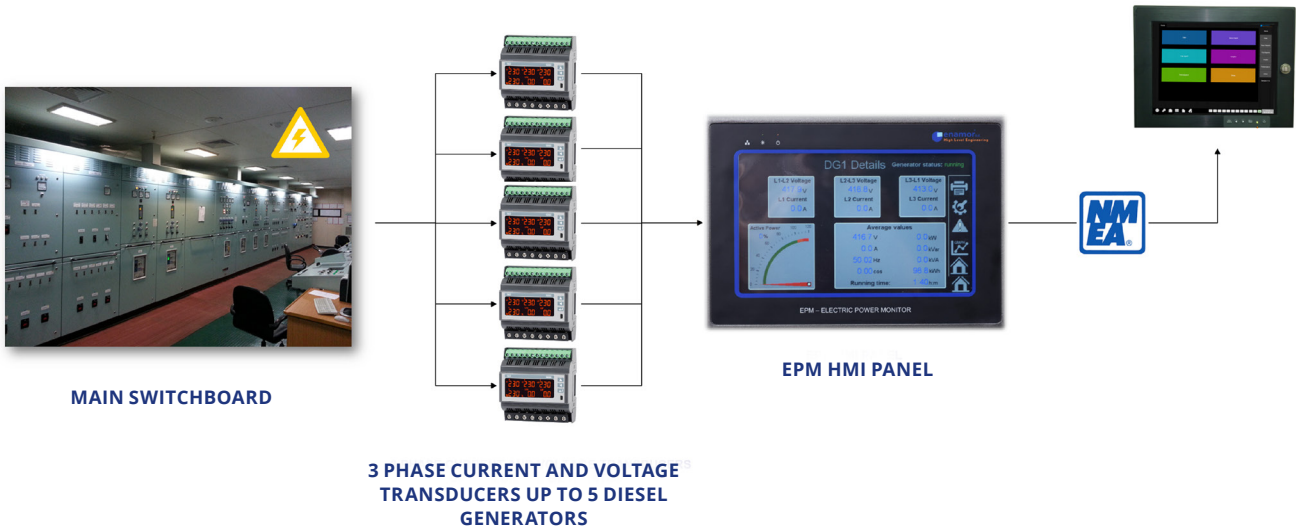
Measuring accuracy:

- Voltage: $\pm 1.0\%$
- Current: $\pm 0.5\%$
- Frequency: $\pm 0.5\%$
- Active power: $\pm 1.0\%$
- Power factor: $\pm 1.0\%$

ELECTRIC POWER MONITOR - EPM

REMOTE MONITORING OF POWER GENERATED ONBOARD

SHIP ENERGY OPTIMIZATION SYSTEM OR OTHER SYSTEM



Additional Information

Used transducers are designed to measure generator's voltage and current in 3-phases (by separate transducer for each generator). EPM installation and commissioning can be done during the trip.

EPM can be integrated in SEEMP Set for the purpose of ship overall performance optimization.

