

Main line of products

From the simple pneumatic indicator to the microwave level measurement system, Enraf Marine Systems offers the most reliable technology for each specific application. All of these products are approved by international classification societies such as: ABS, Bureau Veritas, DNV, GL, Lloyd...Finally, we also offer complete safety systems complying with the IMO requirements (VEPCA PRAPA VAPMA...). Each system stands alone and adapts to the ship's type.



EM540 and EM940

The EM940 EM540 Radar level gauges

Enraf Marine Systems offers leading tank gauging solutions with the **EM940** radar for tankers and **EM540** radar for inland ships, complying with the latest maritime regulations.

With several thousands of radar units in operation, EMS offers the most reliable technology for each specific application.

The PL3700 series - level or pressure transmitters

Including a ceramic cell, the **PL3700 can be used as a level gauge or a pressure transmitter in a Marine environment** in compliance with the toughest regulations.

Main features of the PL3700:

- wide thermal range of operation (up to 125°C) with an active temperature compensation.
- excellent and stable accuracy (+/- 0.2 %)
- mechanical ruggedness allowing resistance to overpressure and corrosion
- built-in ASIC
- intrinsic safety design
- availability of absolute and relative types
- composite or stainless steel sensor housing.



PL3700 series

The LIDEC series - level sensing switches

Developed in cooperation with «Paris VI» University, the Lidec series liquid level sensing switches series are especially designed for marine applications. **They provide a reliable solution to liquid level detection.**

Their operating principle, a patent granted to Enraf Marine Systems, **is based on the mechanical wave propagation inside a stainless steel probe.** This principle is fully static, without vibration or moving parts. A "self-monitoring" function ensures the reliability of this equipment. This allows these sensors to be used in safety systems such as overfill protection, bilge well alarm and water ingress detection...



LIDEC series

The CT801 series - electro-pneumatic level transmitters

The electro-pneumatic level transmitters allow remote level measurements to be made using a 4-20 mA analog output, which **is based on the bubbler-type principle.**

These transmitters are designed to avoid common malfunctions such as **lack of air pressure supply** or overpressure. The CT801 series proven reliability has made it the standard reference for equipment in this category.

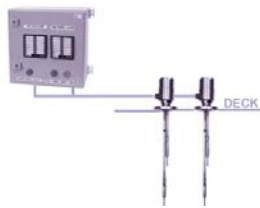
More than 2000 vessels have already been equipped with these sensors (especially passenger vessels where safety and reliability are highly important).



CT801 Series

The complete safety solutions

Enraf Marine Systems has a leading position for versatile gauging systems which can be mounted on all types of vessels and platforms. These comprehensive high-performance measuring systems are complying with the latest maritime regulations and the requirements of IMO rules. Systems are self reliant, and supplied as turnkey equipment.



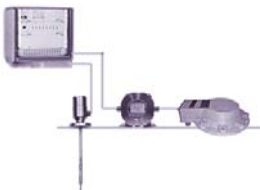
CARLA

The CARLA system is designed to meet the requirements for cargo tank high level alarm and overflow protection. Its main advantage is the use of the LIDEC L92 as a level sensor. The control cabinet and its components have proven an outstanding reliability over time.



GASBAL

The GASBAL™ system is designed to detect and analyze gas concentration in closed spaces such as ballast tanks, void or dry spaces. The system scrolls each input and activates an alarm if the gas concentration is over the pre-set value. This gas detection system can be installed on board tankers, OBOs, offshore vessels and rigs.



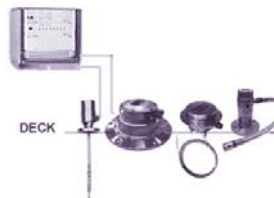
IWACS

The IWACS system is based on an 8" EM540 radar level gauge especially designed to be integrated within a dedicated cargo monitoring system for inland vessels. The use of an intrinsically safe two-way digital signal transmission provides for an easy integration of the Radar into any type of control system.



PRAPA

The PRAPA system is a stand alone monitoring which protects pump bearings room, as well as pump-room atmosphere. Each pump bearing is monitored, as well as the pump-room atmosphere (Explosive or toxic vapors). The LIDEC L20-70D sensors allow the bilge drains in the room to be monitored. The entire set of parameters is available on a control cabinet located in the non-hazardous area.



Tanker Liquid Management System

This cargo monitoring system for tanker is based on a distributed data processing architecture, using the 10" EM940 Radar level gauge associated with two specific IS racks the TA3840C dedicated to communication and the TA3840S for power supply. The use of an intrinsically safe two-way digital signal transmission, provides for an easy integration of the radar into any type of control system



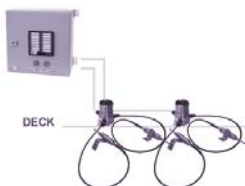
VAPMA

The VAPMA system is designed to carry out pressure monitoring of vapor space in cargo tanks is designed for the compliance of currently operating chemical tankers, with regulations by performing pressure monitoring of the vapor space in each cargo tank.



VECPA

The VECPA system uses pressure sensors with a high resistance to gas corrosion to monitor inerting gas. Oxygen concentration analysis is performed through a flow-regulating valve, which provides very high measurement accuracy and avoids any dubious readings due to the widely varying flow rate of the inerting gas.



WIDS

The WIDS system is designed for detecting the presence of water in all cargo holds. It is made up of Lidec L20-70D liquid level detector which can be connected directly to a central alarm unit. For safety purpose this system offers an independent solution.