

OPTIMARE SpillWatch!® LR

Long-range non-contact oil spill detection and alarm, also available as OPTIMARE SpillWatch!® LREx (ATEX Version)



- Real-time around-the-clock detection and control of oil spills for offshore platforms, oil rigs, petrochemical industry, pipelines, power plants, harbors and desalination, intake protection
- Detection range: up to 30 m
- Ruggedized design (IP66)
- Cost-effective, low-maintenance
- Highly effective LED-based excitation
- Fluorescence-based excitation & detection
- Multiple interfaces network connectivity

Product Line

The OPTIMARE SpillWatch!® LR is the long-range variant of the industry-proven OPTIMARE SpillWatch!® system. The OPTIMARE SpillWatch!® LR is part of the OPTIMARE SpillWatch!® product line which encompasses various noncontact oil-on-surface detectors for different application areas. OPTIMARE SpillWatch!® and its LR version are also available as ATEX-compliant „Ex-proof“ variants.

Application

The detection of oil, including crude oil, diesel/fuel oil, motor oil, lube oil, gasoline, food oils etc. spilled to the water or land surface is widely required in industrial and environmental applications. A timely alert enables countermeasures not only limiting damage to the environment but also reducing cost for remediation and clean-up. Due to its detection range of up to 30 meters the OPTIMARE SpillWatch!® LR system is especially suited for installation on oil rigs.

Technique

The OPTIMARE SpillWatch!® LR sensor is installed downward-looking above the surface. The sensor technology is based on fluorescence excitation and

detection. Its innovative optical set-up and all-solid-state opto-electronic components guarantee high sensitivity and allow low-maintenance operation. The System automatically filters out ambient conditions (e.g. sunlight), providing highly reliable detection under all light, weather and surface conditions.

Action

In case of a spill, the OPTIMARE SpillWatch!® LR provides an instant warning, enabling users to take countermeasures, e.g. shutting off pumps or valves and notify personnel via a variety of interfaces and wireless options. The OPTIMARE SpillWatch!® LR is designed and manufactured for deployment in rugged settings.



OPTIMARE SpillWatch!® LR installed on an offshore platform

Technical Data

OPTIMARE SpillWatch!® LR

SENSOR SPECIFICATIONS

Sensor principle	Detection of fluorescing oil components
Range	2 – 30 m (depending on oil type)
Background compensation	Constant or adaptive
Alarm settings	Customizable, independently for both on and off Status

COMMUNICATION/INTERFACE

User interface	RS232/422 serial interface and SpillControl Software Direct connection only necessary for initialization
Signal output	2 relay contacts (detect/no detect and status) 4 – 20 mA 0 – 10 VDC

MECHANICAL PROPERTIES

Dimensions	550 mm x 550 mm x 300 mm
Mass	48 kg
Enclosure	IP 66, weatherproof stainless steel housing

POWER SUPPLY

Voltage	100 - 240 V AC; 50 - 60 Hz
Power consumption	20 Watt typical
Power options	Solar and/or wind-powered
Purge Gas	Air
Pressure	2 bar
Flow	0.6 liter/min (typical 2.1 liter/min)

OPERATING/STORAGE CONDITIONS

Operating temperature	-10 °C to + 45 °C Lower/higher temperature options available
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ATEX VERSION

Version	II 2(1)G Ex px [op is Ga] IIC T4 Gb
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