

# OPTIMARE SpillWatch!® LR

## OPTIMARE SpillWatch!® LREx (ATEX Version)

### Long-range non-contact oil spill detection and alarm

#### FEATURES

- Real-time around-the-clock detection and control of oil spills for
  - Offshore platforms, oil rigs
  - Petrochemical industry, pipelines
  - Power plants
  - Harbors
  - Desalination, intake protection
- Detection range: up to 30 m
- Ruggedized design (IP66)
- Cost - effective, low - maintenance
- Highly effective LED-based excitation
- Based on fluorescence excitation and detection
- Multiple interfaces network connectivity



OPTIMARE SpillWatch!® LR installed on an offshore platform.

#### 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 non-contact oil-on-surface detectors for different application areas. OPTIMARE SpillWatch!® and its LR version are also available as ATEX-compliant „Ex-proof“ variants. For further information please get in touch with OPTIMARE.

#### 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.

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### Long-range non-contact oil spill detection and alarm

| SPECIFICATION                       |  |
|-------------------------------------|--|
| <b>Sensor specifications</b>        |  |
| 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 |
| <b>Communication/Interface</b>      |  |
| 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   |
| <b>Mechanical properties</b>        |  |
| Dimensions                          | 550 mm x 550 mm x 300 mm                               |
| Mass                                | 48 kg  |
| Enclosure                           | IP 66, weatherproof stainless steel housing            |
| <b>Power supply</b>                 |  |
| 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)                  |
| <b>Operating/Storage conditions</b> |  |
| Operating temperature               | -10 °C to + 45 °C                                      |
|                                     | Lower/higher temperature options available             |
| ATEX Version                        | II 2(1)G Ex px [op is Ga] IIC T4 Gb                    |