

# Leakwise Oil-on-Water Detection and Monitoring Systems

*For the reliable detection, monitoring, measurement,  
alerting, and control of hydrocarbons on water*



# What Leakwise Does for You

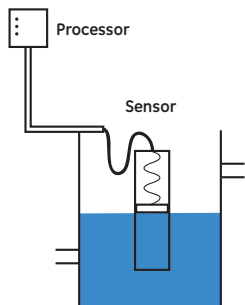
- Provides early warning by continuous, on-line detection of hydrocarbons on water starting at 0.3 mm
- Monitors buildup of hydrocarbons on water
- Provides linear measurement of hydrocarbon layers in the range of 1–200 mm or greater
- Installs easily
- Operates virtually maintenance-free over extended periods of time
- Ensures reliable detection, regardless of:
  - Coating of sensor with dirt or oil
  - Changes in water salinity or temperature
  - Variations in water table
- Conforms to EPA regulations
- Certified for operation in hazardous areas
- Specifications and performance tested and approved by the German TÜV
- Offers convenient, user-adjustable set points of “Low Oil” and “High Oil” for alarm and control
- Displays processor output with two relays and four indicator lights (water/air/oil/ sensor disconnect); optional outputs include 4-20 mA, RS-232/RS-422, a bar graph, and audio alarm
- Sends alarm and status messages via PTP radio or cellular communication with optional wireless sensor



## Leakwise Provides Reliable, Early Detection of Oil Leaks or Spills

Leakwise is the most versatile and reliable sensor system available for oil-on-water detection and monitoring. The Leakwise system can help you avoid expensive downtime, regulatory fines, and cleanup costs by:

- **Detecting** the presence of any type of hydrocarbon on water immediately
- **Monitoring** the buildup of hydrocarbons on water
- **Measuring** hydrocarbon layer thickness with accuracy in the range of 1–200 mm or greater
- **Alerting** facility operators of oil presence or thickness with visual or audible alarms and messages
- **Controlling** skimmers, discharge pumps, and shutoff or diverter valves with a remote or local relay contact



### System Components

A Leakwise system consists of a wired or wireless signal processor and one or more sensors, depending on your application needs. The intrinsic-

sally safe sensors work in virtually any type of water. They continue to work even when coated with dirt or oil, thus eliminating false alarms. In fact, Leakwise sensors are designed to perform for years, maintenance-free, without parts replacement.

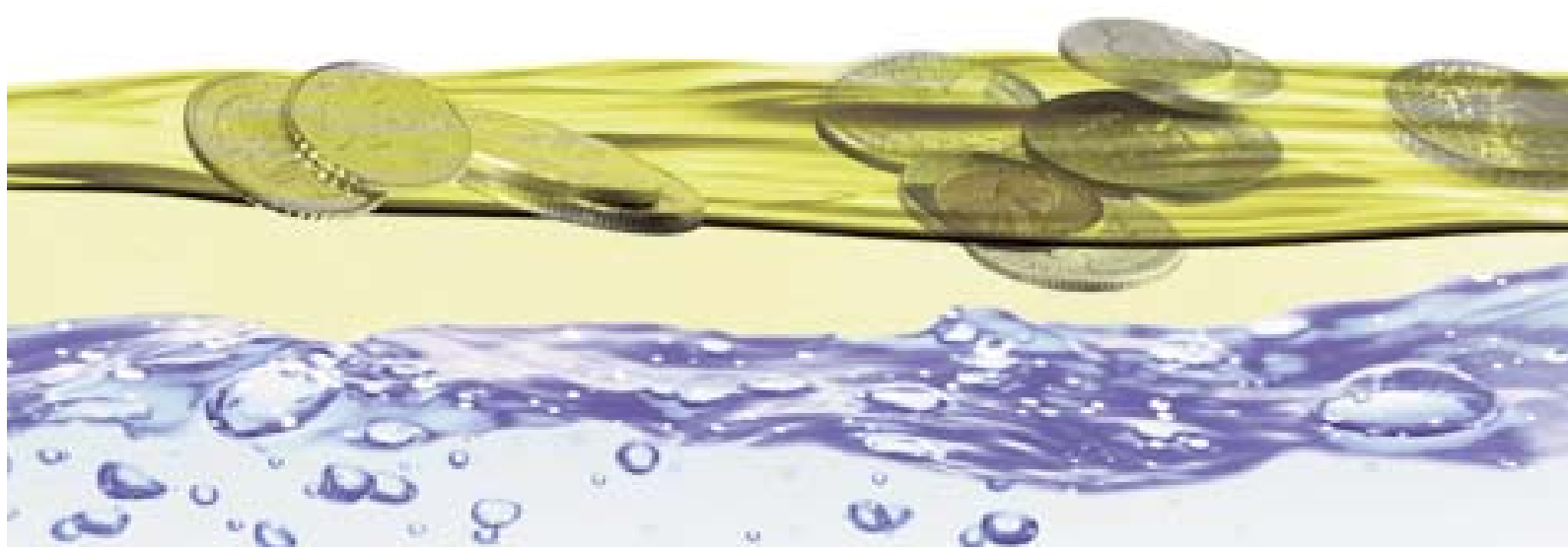
### World Class Technology

The Leakwise sensors use a patented, high-frequency Electromagnetic Absorption Technique. Each floating sensor houses a high-frequency electromagnetic energy transmitter and a receiving antenna which continuously monitor the liquid surface.

Since water absorbs more electromagnetic energy than hydrocarbons, changes in the absorption rate of water indicate the presence or buildup of hydrocarbons.

The Leakwise sensors not only enable reliable detection of hydrocarbons, but also provide valid indications of the thickness of the hydrocarbon layers and the percent of water in oily emulsions.

The Leakwise sensors can be used to detect the interface between any two immiscible liquids with different absorption rates. No other oil sheen monitoring system does this.



## Industries and Applications

### Oil/Petrochemical

- Refining
- Petrochemical
- Oil Storage
- Pipelines
- Gas Stations
- Stormwater Runoff

### Power Generation and Distribution

- Fossil
- Nuclear
- Hydroelectric
- Transformer Switchyards
- Remote Substations
- Underground Transmission

### Offshore

- Oil Ports
- Rivers/Lakes
- Desalination Intake Protection
- Jetty Terminals
- Monobuoy Terminals

### Transport

- Ships
- Airports
- Railways
- Parking Areas
- Highways

### Manufacturing

- Steel/Aluminum
- Pulp and Paper
- Edible Oils
- Pharmaceuticals
- Auto Production

### Water

- Wastewater Treatment
- Remediation Sites
- Stormwater Monitoring
- Groundwater Monitoring

# Leakwise Versatile Sensors and Processors

## ID-225

Measures oil thickness for oil/water separators, oil traps, wet sumps, tanks, ponds, and monitoring wells.



## ID-227

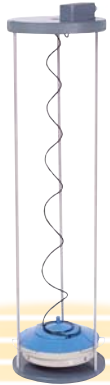
Works in a variety of marine and open water applications.



ID-223/2000



ID-223/2500



ID-223/500

## ID-223

Operates in dry and wet sumps, open channels, and catch basins.



## ID-221

Detects floating oil sheens in wet sumps, tanks, ponds, and monitoring wells.

## ID-227WL/PTP

Provides wireless monitoring near offshore oil rigs and other open water areas.



## PS-220

Analog single sensor control



PS-220 Weather Proof



PS-220 Explosion Proof

## Versatile Signal Processors

Digital multiple sensor controls



DSP-220



SLC-220

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**The Americas**

GE Analytical Instruments  
6060 Spine Road  
Boulder, CO 80301-3687 USA  
T +1 800 255 6964  
T +1 303 444 2009  
F +1 303 527 1797  
geai@ge.com

**Europe/Middle East/Africa**

GE Analytical Instruments  
Unit 3, Mercury Way  
Urmston, Manchester  
UK M41 7LY  
T +44 (0) 161 864 6800  
F +44 (0) 161 864 6829  
geai.europe@ge.com

**Asia Pacific**

GE Analytical Instruments  
7/F, Building 5, No.2 Hua Tuo Rd.  
ZhangJiang Hi-Tech Park, Pudong  
Shanghai, China 201203  
T +(8621) 38777735  
F +(8621) 38777469  
geai.asia@ge.com

