

# Oil in Water Alarm HSS 1026 Hydro Surveillance System

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The **INVALCO HSS 1026** oil in Water monitor has been designed for municipal and industrial applications to measure PPM levels of hydrocarbons in aqueous solutions. Typical applications include PPM trace amounts of oil in effluent water from storm water runoff, oil in cooling water, produced water, and oil/water separators. Other measurements and mediums can be monitored on request (i. e. colorants in fluids, etc.).

A continuous sample is directed into the cuvette using a pumped or process pressure source. A minimal flow rate is required. The sample is released from the cuvette by a gravity flow to a drain or sump.

The INVALCO HSS 1026 uses a light scatter technique to respond to oil contamination in the water. A slip stream approach directs a continuous sample flow through the Hydro Surveillance System and back into the process stream. While it passes through the sample cell a controlled light source is directed into the water. The emulsified oils in the water will scatter the light toward the light sensors placed strategically around the cell. The intensity of light energy is measured to provide an indication of the ppm concentration.

## Features and Benefits

- Ultrasonic disc generates a continuous cleaning action within the sample cell to reduce maintenance frequency
- Compensation for temperature and lamp deterioration minimizes re-calibration requirements
- Long life lamp
- Desiccant chamber keeps electronics dry in humid conditions
- Continuous display updates every one second
- No consumables or chemical used
- Sample flow returns to the process
- Sample cell can be exchanged with prepared
- Samples for easy testing and calibration
- No tools necessary for routine maintenance



## Performance

The performance is based on the site calibration to a known hydrocarbon concentration in stable background water. Changes in hydrocarbon make-up and background stability may affect the output. Through a simple calibration, this unit correlates well with laboratory ISO and EPA methods.

## Specifications

### Measurement Range

0-100 PPM

### Accuracy

±5% of span

### Resolution

0.1 ppm

### Response Time

Adjustable

### Display

Multi-Line Liquid Crystal Backlit Display

### Alarms

Two Programmable, 120-240VAC 2A Form C Relay

### Analog Output

Powered 4-20mA, 600 - drive

### Communications Port

Bi-directional RS-485, Modbus Optional

## Specifications (continued)

### Maximum Water Pressure

Integral pressure regulator rated 1380kPa (200 PSI.) Also refer to Flow Rate

### Flow Rate

100 ml/min. – 1 liter/min. (.026- .26 Gal/min)

### Operating Temperature

1°C – 50°C (34°F – 122°F)

### Wetted Materials

Nylon, Borosilicate Glass, Silicon, Polypropylene, Stainless Steel

### Sample Temperature Range

1°C – 50°C (34°F – 122°F)

### Power Supply Ordering Information

100 – 240 VAC, 47 – 63 Hz, 80VA

### Insulation Rating

Double Insulated, Pollution Degree 2, Overvoltage Category II

### Environmental Conditions

Not recommended for outdoor use. Altitude up to 2000 meters. Up to 95 % RH (non-condensing)

### Enclosure Rating

IP 66 /NEMA 4X

### Certifications

CE Approved, ETL listed to UL 3111-1 & ETL Certified to CSA 22.2 No. 1010-1-92

### Shipping Weight

2.5 kg (5.5 lbs.)

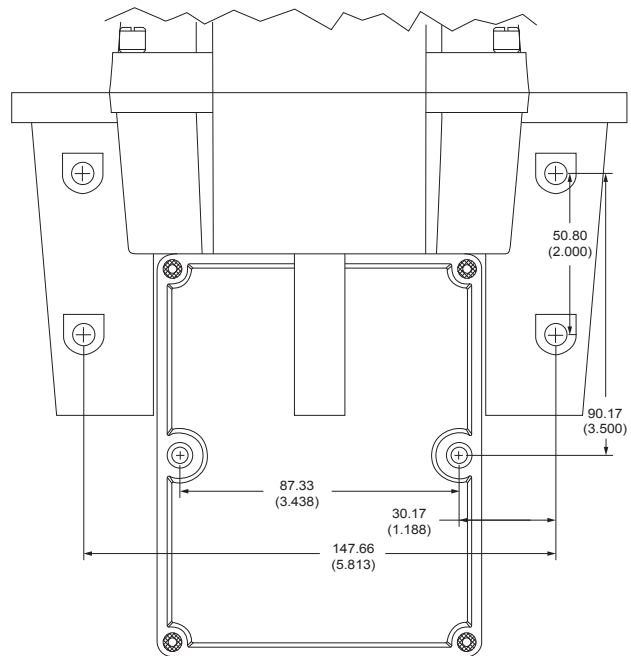
### Warranty

1 Year from date of shipment

*Please consult factory for Part Number and additional information.*

## Mounting Template

All dimensions are in millimeters (inches).



### Notes:

- See the mounting instructions in the manual for mounting hardware sizes.
- Provide at least 200 mm (8 inches) of free space above the sensor for easy removal of the flow head and insertion of the calibration standards.

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.