

# Oil in Water Monitor HSS 1036 Hydro Surveillance System

Bulletin SSIN021 Issue/Rev. 0.1 (1/19)

The **INVALCO HSS 1036 Hydro Surveillance System** is a filter fluorescence photometer with a fixed excitation bandpass source (365 nm) and an emission bandpass filter (460 nm). It is designed specifically for the quantitation of low ppm concentration measurements of aromatic hydrocarbons (oil) in water.

The HSS 1036 uses a UV fluorescence technique to target the aromatic component of the oil contamination. Through a site calibration this aromatic tag provides an indication relative to total oil. The sample vial is placed into the sample well. A non-contacting UV light source targets the sample with filtered light energy. The soluble and emulsified oils in the water will excite from this light energy and fluoresce light energy back out of the water at a signature wavelength. The intensity of light energy at this wavelength is measured to provide an indication of the ppm concentration.



## Features and Benefits

- Solvent extraction qualifies sample to ISO and EPA methods
- Fast sample preparation and immediate readings
- Controlled and safe use of solvents
- Easy calibration and instrument set-up
- Reading printout serial port
- Bright backlit display of ppm readings
- Long life lamp
- No lag time, sample injection, or evaporation
- Ideal for site screening and process trend monitoring
- Compliments and supports existing laboratory results

## 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

### Power Requirements

- Frequency: 47 – 63 Hz
- Line Voltage: 90 – 260 VAC
- Power Consumption: 15 W

### User Interface

2 line x 16 characters Backlit LCD, Membrane keypad

### Communication Port

RS232C, 9 pin male serial connector, 1200 baud, 8 data bits, 1 stop bit, no parity

### Dimensions

4.72 x 6.26 x 13.5 inches (12 x 15.9 x 34.3 cm) (h x w x d)

### Weight

3.75 lbs (1.7 kg)

### Operating Environment

Indoor Use 59°F to 104°F (15-40°C)

## Specifications (continued)

### Relative Humidity

- 80% for 59°F to 88°F (15 – 31°C)
- Decreasing linearly to 50% for 88°F to 104°F (31 – 40°C)
- Altitude: 6562 ft (2000 m)

### Light Source

- Type: Mercury lamp
- Excitation Wavelength: 365 nm ± 7 nm at Full Width Half Maximum
- Expected Life: 5000 hours

### Emission Filter Type Ordering Information

- Interference filter
- Emission Wavelength: 460 nm ± 15 nm at Full Width Half Maximum

### Fuse Values (internal)

F3.15 A, 250 V, Microfuse (2) on PCB; F2 A, 250 V, 5 x 20 mm on power module

## Safety Specifications

### Safety

- UL3101-1
- CSA 22.2 No. 1010-1
- EN61010

### Emissions

- FCC Part 15 Class A
- EN55011 Class A

### Immunity

- EN50082-1
- Listed by ETL Testing Lab
- CE Marked

### Notes:

- This declaration of conformity is only valid for this instrument when it is: used in approved locations and used as delivered from TechnipFMC except for alterations described in the User Manual.
- Please consult factory for Part Number and additional information.

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.