

# Oil in Water Monitor HSS 1016 Hydro Surveillance System

Bulletin SSIS016

The INVALCO HSS 1016 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.).

The INVALCO HSS 1016 uses a UV fluorescence technique to target the aromatic component of the oil contamination. Through a site calibration this aromatic tag is able to provide an indication relative to total oil.

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, filtered UV light is targeted in the water. 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

- Ultrasonic disc generates a continuous cleaning action within the sample cell to reduce maintenance frequency
- Compensation for temperature and lamp deterioration minimizes recalibration 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
- So 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**

1	Measurement Range
(	0-100 PPM
	Accuracy
	±5% of span
1	Resolution
(	0.1ppm
1	Response Time
,	Adjustable
	Display
ļ	Multi-Line Liquid Crystal Backlit Display
	Alarms
•	Two Programmable, 120-240VAC 2A Form C Relay
,	Analog Output
ļ	Powered 4-20mA, 600 $\Omega$ drive
,	Communications Port
ļ	Bi-directional RS-485, Modbus Optional
ł	Maximum Water Pressure
	Integral pressure regulator rated 1380kPa (200 PSI.) Also refer to Flow Rate
1	Flow Rate
	.02626 Gal/min (100 ml/min. – 1 liter/min.)
,	Operating Temperature
;	34°F – 122°F (1°C – 50°C)
	Wetted Materials

#### Wetted Materials

Nylon, Borosilicate Glass, Silicon, Polypropylene, Stainless Steel

### Sample Temperature Range

34°F – 122°F (1°C – 50°C)

#### **Power Supply**

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

5.5 lbs. (2.5 kg)

#### Warranty

1 Year from date of shipment

# **Ordering Information**

Please consult factory for Part Number and additional information.





www.fmcinvalco.com

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.

FMC INVALCO Fluid Control Stephenville, TX 76401, Phone: 254/968-2181, FAX: 254/968-5709, Toll Free: 800/468-2526 Printed in U.S.A. © 9/06 FMC INVALCO All rights reserved.