**WALCHEM**
IWAKI America Inc.

**Pyxis**

# HM-900

## Oil-in-Water Portable Analyzer

### HM-900 Description

The Pyxis HM-900 is a handheld portable fluorometer that measures the concentration of multiple oils in water utilizing and LED sourced UV-fluorescence methodology at 365nm wavelength and 410nm excitation. Dual Channel Wavelengths of Fluorescence enable automatic range selection.

### HM-900 Features

**Two Extraction Methods** - The HM-900 offers measurement of oil content through Hexane extraction and Pyxis prepared non-toxic /non-flammable solvent, for a safer and more convenient measurement reducing sample preparation steps. Both 24 mm and 16 mm sample vials may be used with HM-900.
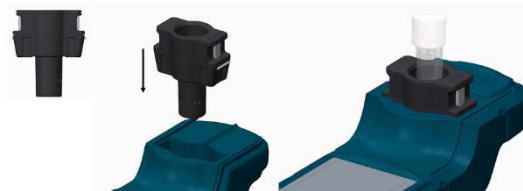
**Pre-programmed Calibration Curves for Primary Oil Classes** - The HM-900 has three default built-in calibration curves for **Marine Crude Oil, #1 Diesel/Kerosene, and Heavy Fuel Oil.** The user may select which of these three formats are desired for final measurement display. Users may also create up to 7 customized/user defined calibration curves for the specific oil desired.

**Suitable for Direct Read Method for Dissolved or Emulsified Oil -** The HM-900 can be used to directly analyze oil in water content without the need for extraction using UV fluorescence methodology. This method is commonly utilized for samples containing dissolved or lightly emulsified oil.

**Secondary Standard for Rapid Calibration** – Preparation of a true oil in water calibration standard is both time consuming and subject to error. As such, the HM-900 can also be calibrated using Pyxis synthetic OIW-500 (oil in water) secondary standard. This approach enables users to utilize a synthetic oil in water standard for rapid device calibration, improved accuracy and extended shelf life of the calibration solution.


*HM-900 Series Oil In Water*


*16mm Adapter for Pyxis Extraction Vials*

## Typical Applications

- Heat exchanger leakage detection
- Oil tank leakage detection
- Intake water monitoring (UF & RO Feedwater)
- Reinjection water monitoring
- Industrial wastewater monitoring
- Marine discharge monitoring
- Plant runoff / storm water monitoring

## HM-900 Specifications

| Item | Parameter |
|---|---|
| Power Supply | 4 alkaline batteries |
| Wavelength | 365/470 (ex/em) and 470/650 (ex/em) |
| Detection Limit | 0.1 ppm (Marine offshore oil) |
| Range | 0.1 – 1000 ppm, auto channel switch |
| Battery Life | 2 months |
| Display | 192 x 128 LCD, readable under direct sunlight |
| Weight | 1.1 pound (510 g) |
| Dimension | L 265 mm W 88 mm H 62 mm |
| Temperature | Working: 14 - 122 °F (-10 - 50 °C) / Storage: -4 - 158 °F (-20 - 70 °C) |
| Enclosure Rating | IP65 |
| Regulation | CE |

## HM-900 Accessories

| Item | 16mm Solvent Filled Extraction Vial | Oil-In-Water Secondary Standard Solution |
|---|---|---|
| Product | **16mm-OIW** | OIW-500 |
| Part Number | 52211 | 21036 |
| Range* | 0-1000ppm | 500ppm as Oil in Water |
| Shelf Life | 6 months | 6 months |
| Container | 16mm Extraction Vial Prefilled with non-flammable solvent | 16 oz/500mL Nalgene Amber Narrow Mouth Sample Bottle |
| Volume (net) | 12 vials /~5mL each | 510 +/- 10mL |
| Weight (net) | 12 vials /~5g each | 510 +/- 10g |

*Undiluted Range is specified above.*

## Turbidity and Color Compensation

Pyxis HM-900 series sensors are uniquely designed with extra photo-electric components that also monitor the color and turbidity of the sample water. This proprietary feature enables the HM-900 series to automatically compensate for color and turbidity in the water sample eliminating interferences commonly associated with real-world waters.

## uPyxis Mobile & Desktop APPS for Wireless Data Upload & Calibration

The HM-900 device offers integrated Bluetooth connectivity allowing wireless data upload via the uPyxis APP. The uPyxis APP manages all Pyxis portable meter and inline sensors on mobile and desktop devices, including Apple iPhones and Samsung Android smartphones.

Additionally, the Integrated Bluetooth connectivity allows the HM-900 to perform a wireless calibration of your inline HM-500 Oil-in-Water probe, eliminating unnecessary time wasted with calibrating the probe through the receiving controller and ensuring the highest degree of accuracy.

*Note* The uPyxis Mobile APP is evolving rapidly and users can find the latest version at no cost on Apple iStore or Google Play. The uPyxis Desktop APP may be downloaded at https://pyxis-lab.com/support-2/

| Ordering Information | P/N |
|---|---|
| HM-900 Oil-In-Water Portable Analyzer | 52201 |
| 16 mm Adapter for Pyxis Extraction Vial | 52213 |
| | |
| **Optional Accessories** | |
| 16mm-OIW (16mm Solvent Filled Extraction Vial Pack of 12) | 52211 |
| OIW-500 (Oil-in-water Secondary Standard Solution – 500mL Bottle) | 21036 |

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