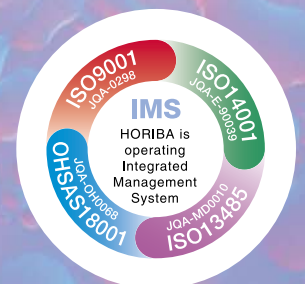


# HORIBA

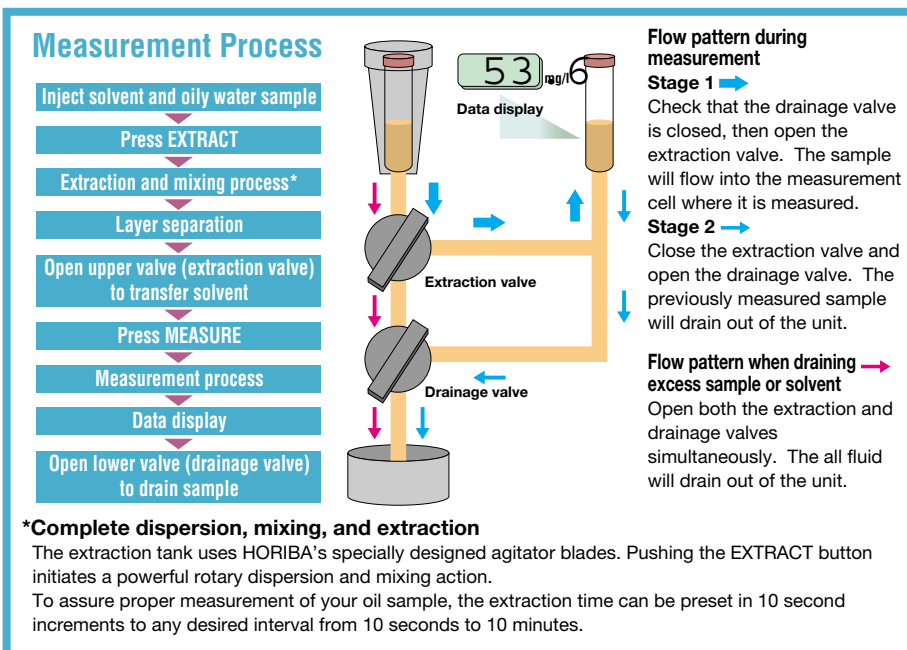
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## OIL CONTENT ANALYZER OCMA-310



# Stable readout and a broad dynamic range assure accuracy and reliability

The new OCMA-310 Oil Content Analyzer can assess the amount of trace hydrocarbons in soil or water, as well as check for residual hydrocarbons on pre-cleaned products. The extraction of the oil can be done by Freon 113 and S-316. The S-316 solvent used by the unit may be recycled by HORIBA's optional solvent reclaimer, making the OCMA-310 very environmentally-friendly. Furthermore, the unit's broad measurement range eliminates the need for troublesome range switching. As a result, the OCMA-310 is quick, easy to use, accurate, and reliable.



## Backlit 3 digit LCD

The backlit LCD makes it easy to read the results even bright, sunlight. Measurements are displayed in mg/L.

\*OPTION - The unit may optionally be equipped with an analog output, using values between 0-1 Volts to express the range of 0-200 mg/L.

## On-screen messages

A wide range of information is displayed, including operational instructions, status notes, and warning messages, keeping you fully informed at all times.



## Manual control

The two valve system lets you make sure that your sample is measured properly. Inject your sample and press the extract button to initiate mixing and separation. You can visually confirm mixing and separation through the sample window. Open the upper valve (extraction valve), and the sample will flow into the measuring cell. An oil/water separation filter prevents water from entering the cell. An overflow system discharges any excess sample. The lower valve (drainage valve) allows you to drain the sample after it has been measured.

## 0-200 mg/L dynamic range

The OCMA-310's pyro-electric sensor gives you a full dynamic range from 0-200 mg/L. This eliminates the need for range-switching and provides fast, accurate measurements for all types of samples, regardless of concentration levels.

## Quick start-up

The OCMA-310 warms up in less than 30 minutes, enabling you to get started quickly.

## No optical adjustments

The troublesome optical adjustments commonly required by conventional pneumatic NDIR analyzers are no longer necessary.

## Auto hold function

The unit's internal computer automatically determines when the measured value has stabilized and maintains that value on the display.

## Self-diagnosis

The OCMA-310 monitors itself for problems such as motor malfunction, deterioration of the measuring cell's light source, and electrical trouble. Should anything out of the ordinary occur, an alarm light will turn on, and an appropriate error message will appear on the operation display panel.

## Oil/water separation filter

The OCMA-310 is equipped with an oil/water separation filter which prevents water and dirt from entering the measuring cell. This prevents the cell from being damaged, while insuring that the sample being measured is not contaminated.

## 50 channel data memory

With just the touch of a button, you can input and recall up to 50 data sets. Each data set includes a measurement ID number, the time of measurement, and the measured value.

and simplify analysis of oil components.



### Special syringe

The OCMA-310's special syringe lets you accurately measure your sample and solvent, and makes it easy to inject them into the unit with no risk of contamination.



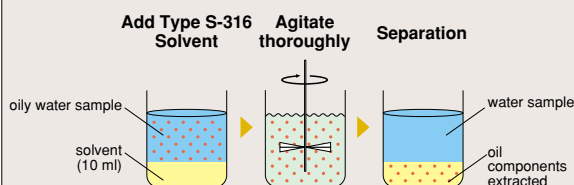
### RS-232C and parallel printer ports

Using these ports, you can output results directly to your computer, data logger, or printer.

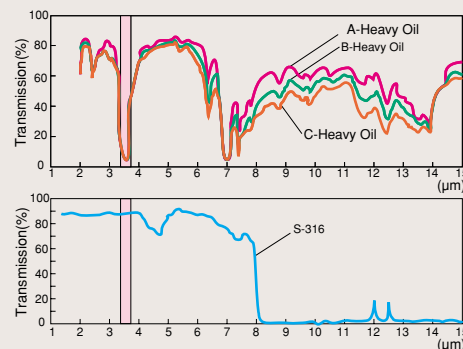


## Extraction Solvent Type S-316 extracts all oil components

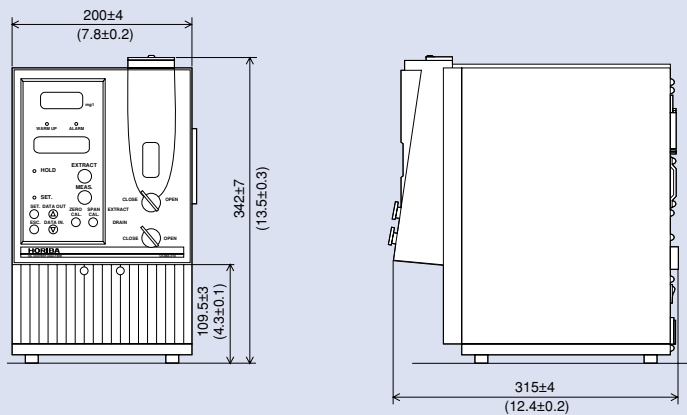
The OCMA-310 uses HORIBA's special S-316 Solvent to extract the oil components from oily water samples, soil samples, or product surfaces. The extract is measured using IR absorbance, a non-dispersive infrared spectrophotometric technique which is specific to hydrocarbons such as oil.



The OCMA-310 measures absorption in the 3.4-3.5 micrometer range. The two graphs at the right show the absorption spectra of (1) petroleum and (2) HORIBA's S-316 solvent. All hydrocarbons, including oils, absorb infrared radiation between 3.4-3.5 micrometers. As a result, the unit measures any hydrocarbons in the extraction solvent quickly and accurately, with no distortion of values due to the presence of the solvent.



## Dimensions Unit: mm (in)



## Specifications

**Application:** Oil contamination of fresh and salt water; soil analysis

**Principle:** Solvent extraction, NDIR analysis (Infrared spectroscopy)

**Detector:** Pyroelectric sensor

**Measuring range:** 0 to 200 mg/L

**Resolution:** 0 to 99.9 mg/L; 0.1 mg/L  
100 to 200 mg/L; 1 mg/L

**Repeatability:**

0 to 9.9 mg/L;  $\pm 0.2$  mg/L  $\pm 1$  digit  
10.0 to 99.9 mg/L;  $\pm 2.0$  mg/L  $\pm 1$  digit  
100 to 200 mg/L;  $\pm 4$  mg/L  $\pm 1$  digit

**Measurement:** Manually controlled

**Calibration:** One touch calibration after the calibration standard is introduced to the instrument

**Extraction solvent:** HORIBA S-316 solvent (Standard 3 accessories)

\*use only S-316, not other solvent

**Sample/solvent volume:** 20 mL, ratio of sample to solvent is 2:1.

**Extraction method:** Built-in extractor for oily water samples

**Display:** Measured value; 3 digits LCD with back light

Message; Character display LCD with back-light (16 x 2 characters), English or German

**Functions:** Data memory up to 50 Data, self diagnostics, auto hold function, interactive operation, calendar clock

**Output:** RS-232C, parallel printer port  
Option: Analog output 0 to 200 mg/L; 0 to 1 V

**Ambient temperature:** 0 to 40°C

**Power requirement:** 100 to 120 V AC  $\pm 10\%$ ,  
50/60 Hz, 80 VA  
200 to 240 V AC  $\pm 10\%$ ,  
50/60 Hz, 120 VA

**Dimensions:** 200 (W) x 315 (D) x 342 (H) mm

**Mass:** Approx. 7 kg

## Recommended Applications

- Environment:** Surveying environmental water quality and hazardous waste sites
- Industry:** Monitoring of waste-water influent and effluent
- Marine transportation:** Checking bilge and ballast discharge
- Petroleum processing:** Monitoring the efficiency of oil/water separation processes
- Oil depots:** Monitoring the discharge produced when cleaning storage tanks
- Automotive:** Monitoring waste-water discharge from service stations
- Quality Assurance:** Measuring residual oil on textiles, metal parts, etc.

## Model SR-305 Solvent Reclaimer (optional)

Designed especially for reclaiming S-316 solvent, this unit features a double column of activated carbon and activated aluminum. It has a large filtering capacity, is easy to operate, and requires no electricity. Highly efficient, the SR-305 can reduce your per test solvent cost.



Please read the operation manual before using this product to assure safe and proper handling of the product.

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