

HORIBA

OIL CONTENT ANALYZER OCMA-300



Automatic measurement and 0 - 200 mg/L dynamic range simplify high-precision analysis of oil components.

The new HORIBA OCMA-300 oil content analyzer comes loaded with a welcome range of innovative features. A Powerful built-in computer makes the new version a joy to use.

Just pour in an aqueous sample and solvent then push a single button. The OCMA-300 takes over and does everything for you — from extracting the oil components to measurement and drain. The whole process is fast, sure, super-accurate — and, of course, no more troublesome range-switching. Now anyone can make precision analyses without special training.

For environmentally-friendly measurements, HORIBA has developed Type S-316 extraction solvent for use with the OCMA. The S-316 solvent can also be recycled by using HORIBA's optional Solvent Reclaimer.

The OCMA-300 is much more versatile, even simpler to use. HORIBA is proud to introduce to the world a truly user-friendly oil content analyzer.

Built-in computer automates calibration and measurement procedures.

Once you have introduced the solvent and oily water sample to the unit, just push the START button. Everything is automated — from mixing and extracting the oil components to measurement and drain. Calibration is a snap. Just introduce deionized water in place of the oily water sample, and the OCMA-300 handles the automated process for you.

Auto-measurement



(* 1) Complete dispersion, mixing, and extraction.

The extraction chamber uses HORIBA's special-design agitator blades. Just push the START button to initiate a powerful rotary dispersion and mixing action. To assure proper measurement of your oil sample, the extraction time can be pre-set in 10-second increments to any desired interval — from 10 seconds to 10 minutes.

(* 2) Automatic fill and drain

The sample cell is filled and drained automatically by solenoid valves. There are no clumsy manual valve to switch.

0 — 200 mg/L dynamic range

A pyro-electric sensor gives you a full dynamic range from 0 — 200 mg/L, with no need for range-switching. This makes the OCMA-300 perfect for fast, accurate measurements of all types of samples, from low to high concentration.

Short warm-up time

Warms up in 20 minutes or less. This means you can get started three times faster than before.

Optical adjustment unnecessary

The troublesome optical adjustments associated with conventional pneumatic NDIR analyzers is no longer necessary.

Stable measurement readout

The OCMA-300 determines automatically when the measured value has stabilized, and holds that value for you. This means you always get consistent, stable data readouts.

Self-diagnosis function

The unit self-monitors for any possible problems, e.g., glitches during measurement; motor or sample-transfer malfunctions; deterioration of the light-source; or electrical problems. Should anything out of the ordinary occur, you can spot it right away by a quick check of the warning lamps and the linked on-screen error messages.



On-screen help and warning messages

A wide range of helpful on-screen assistance — including operational instructions, equipment status, and warning messages — streamlines all your measurement operations.

EXTRACT 40sec.

MEASURE

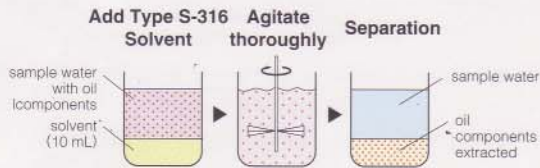
DRAIN

50 data sets in memory

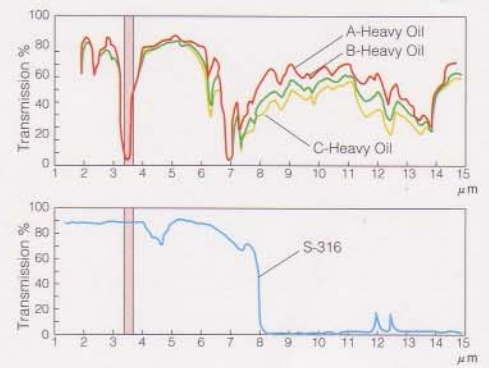
With just the touch of a button you can input and recall up to 50 data sets. Each data set includes measurement I.D. No., data and time of measurement, and measured value.

Extraction Solvent Type S-316 extracts all oil components.

The OCMA-300 uses HORIBA's special S-316 Solvent to extract the oil components from the oily water sample. These are, then, measured by the infrared-absorption method.



The two graphs at right show the absorption spectra of (1) petroleum and (2) Type S-316 Solvent. All types of petroleum absorb infrared radiation in the range of 3.4 μm . Type S-316 Solvent does not absorb infrared radiation in this range. As a result, if measurements are taken in the 3.4 μm range, all the oil components that have been extracted can be measured precisely, with absolutely no influence from the presence of the S-316 Solvent.



Special syringe measures out exact quantities of sample and solvent.

Not only does the OCMA-300's unique syringe-design assure you of exactly the right amount of oily water sample and solvent for each measurement, now there is no longer any worry about contamination-error caused by contact with the fingers.

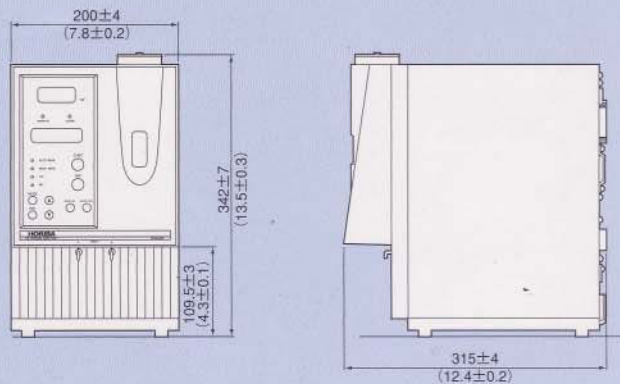


RS-232C and parallel printer ports

These ports link you to the world of MS-DOS computers and printers. The result? Easy printouts and transfer of your OCMA-300 generated measurement data, plus remote operation of the OCMA-300 right from your own PC keyboard.



Dimensional Outline Unit: mm (in)



Recommended Applications

- **Industry** Monitoring of waste-water influent and effluent
- **Marine Transportation** Bilge and ballast discharge
 - **Petroleum** Monitoring plant efficiency of oil/water separation
 - **Oil Depots** Monitoring of discharge from cleaning of storage tanks
- **Automotive** Monitoring waste-water discharges from service stations
- **Environment** Surveying environmental water quality and hazardous waste sites
- **Quality Assurance** Measuring residual oil on textiles, metal parts, etc.

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; ± 0.2 mg/L ± 1 digit

10.0 to 99.9 mg/L; ± 2 mg/L ± 1 digit

100 to 200 mg/L; ± 4 mg/L ± 1 digit

Measurement: Automatic after introduction of the oily water sample or manual operation, selectable

Calibration: Automatic zero and span calibration after the oily water sample is introduced to the instrument.

Extraction Solvent:

HORIBA S-316 solvent

Sample/Solvent Volume: 20 mL/10 mL

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)

Functions: Data memory up to 50 data, Self diagnostics, Stable type display, Interactive operation, Calendar clock

Output: Digital display, RS-232C and parallel printer port

Ambient Temperature: 0 to 40 °C

Power Requirement:

100 to 240 V AC $\pm 10\%$, 50/60 Hz

100 to 120 V AC; approx. 80 VA

200 to 240 V AC; approx. 120 VA

Dimensions:

200(W) X 315(D) X 342(H) mm

7.8(W) X 12.4(D) X 13.5(H) in

Weight: Approx. 7 kg/15.5 lb

Model SR-300 Solvent Reclaimer (option)

Designed especially for recycling S-316 solvent, it features a 2-layer column of activated carbon and activated aluminum. High capacity, simple operation, and needs no electricity.



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

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