

Oil Content Analyzer

OCMA-500



Fully automated one-touch operation, from oil ext

The OCMA-500 Oil Content Analyzer has been redesigned for even better operability, maintaining its user-friendly features.

After injecting the sample, all you have to do is press a button to get the monitoring operation done quickly, from oil extraction to sample measurement and draining. This machine is easy for anyone to use. The OCMA-500 cuts solvent consumption by 20% compared with our previous products, reducing environmental impact. It also reduces the running costs.

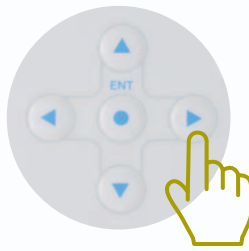


Easy monitoring at the touch of a button

After injecting the sample, all you have to do is press the START button, and the system will automatically conduct the monitoring operation from oil extraction to sample measurement and draining. With no more troublesome tasks like opening/closing the drainage valve, monitoring is speeded up. The color graphic LCD and the backlit extraction tank have improved operability.



1 Inject sample fluid



2 Extraction and measurement



3 Drain sample



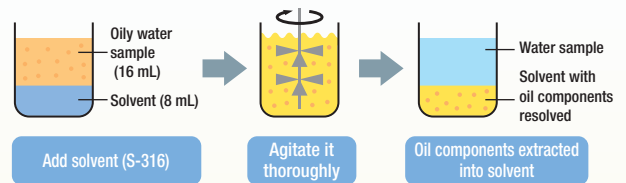
4 Data collection



Reduced environmental impact and running costs (20% cut in solvent consumption*)

Using infrared absorptiometry, the OCMA-500 extracts the oil contained in a sample fluid into solvent S-316 to measure the oil content in the solution with an IR analyzer.

The OCMA-500 cuts solvent consumption by 20% compared with our previous products, reducing environmental impact. It also reduces the running costs.



* Comparison with previous model



Various applications

Wastewater

- Factory wastewater (industrial waste: steel, petrochemical, and food industries)
- Sewage-treatment plant discharge water
- Bilge and ballast discharge of marine transportation (tankers)
- Petroleum-processing plant discharge water and checking the efficiency of oil/water separation processes

Environment

- Surveying environmental water quality in conformity with environmental standards
- Monitoring water quality around gas service stations and automobile repair shops
- Monitoring the discharge water produced when cleaning storage tanks at petroleum terminals
- Surveying oil diffusion in the case of tanker accidents and accidents at petrochemical plants

Parts

- Residual oil in wastewater from cleaning metal parts
- Oil components in cleaning fluids for metal parts
- Oil cleaning efficiency in semiconductor and plated metal bonding processes



Extraction to sample measurement and draining

Color graphic LCD

The OCMA-500 comes equipped with a 3.5-in color graphic LCD. Menus and measurement data can be clearly seen.



▲ Measurement screen

USB flash memory drive port

Storing data on USB flash memories enables easy data management on PCs.



▲ USB flash memory drive port

Measurement Mode

“Auto” and “Manual” valve control measurement are available.

Auto mode: you can measure Sample automatically.

Manual mode: Sample preparation, valve control and measurement are operated manually by cursor button control.

< In case of Manual Mode >

(▶) : Stir , (▲) : Liquid delivery , (◀) : Drain

Backlit extraction tank

The extraction tank is equipped with LEDs. Illuminating the tank makes it easy to check the phase separation between sample and solvent.



▲ Backlit extraction tank

Unit conversion

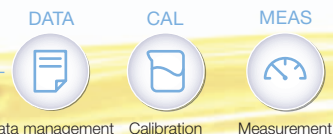
Inputting measurement conditions can change the units displayed (mg/L, mg/kg, mg/g, and mg/PC) as the user needs.

Multi Languages

“Japanese, English, Russian” languages are available.

Simple operation buttons

The buttons have been made simple, and switching between the measurement and calibration screens has been made easier.



Data management

Calibration

Measurement



With no need for a solvent evaporation process, the OCMA-500 offers easy operation, and can detect even oils with low boiling points.

The n-hexane extraction method* needs to evaporate solvent, and any oil with a low boiling point is also evaporated along with solvent. The OCMA-500 does not need to evaporate solvent, preventing evaporation of these kinds of oil (toluene and gasoline).

*N-hexane extraction method:

This method has been used to measure oil components in marine areas, etc. The method is stipulated in Annex 10 of the 1971 Environment Agency Notice No. 59 (N-Hexane Extractable Material (Oil and Grease) Measurement Method). It can produce errors when oil causing pollution contains gasoline, because it loses oils with a low boiling point by evaporation. Also, since it sometimes produces false positive errors due to sulfur compounds contained in soil and petroleum products, and hexane-soluble organic materials in soil, the influence of these substances has to be taken into account when assessing test results.

Specifications

Model	OCMA-500
Product name	Oil content analyzer
Measurement method	Solvent extraction - non-dispersive infrared absorption analysis method
Measured objects	Substances extracted from sample water into solvent and having infrared absorption near a wavelength from 3.4 μm to 3.5 μm
Measurement range	0 mg/L to 200 mg/L
Resolution	For mg/L 0 to 99.9: 0.1, 100 to 200: 1 For mg/g, mg/kg, mg/PC 0 to 9.99: 0.1, 10.0 to 99.9: 0.1, 100 to 200: 1
Repeatability	0 mg/L to 9.9 mg/L: ±0.2 mg/L ±1 dig. 10.0 mg/L to 99.9 mg/L: ±2.0 mg/L ±1 dig. 100 mg/L to 200 mg/L: ±4 mg/L ±1 dig. * For standard liquids
Display method	3.5 inches, 320 X 240 dots Backlight Color graphic LCD
Calibration method	Zero, span calibration
Amount of test sample required	Sample water : Solvent = 2:1
Extraction solvent	S-316
Amount of extraction solvent required	8 mL
Extraction method	Built-in extractor
Ambient operating temperature	0°C to 40°C (no condensation)
Power supply	AC 100 V to 240 V ±10%, 50/60 Hz
Power consumption	AC 100 V: Approx. 60 VA, AC 240 V: Approx. 90 VA
External dimensions	342 (H) X 200 (W) X 313 (D) mm
Mass	Approx. 7 kg
External output	Output to an USB memory stick
Functions	<ul style="list-style-type: none"> ● 300-item data memory ● Self error determination ● Stabilized measurement value display ● Clock

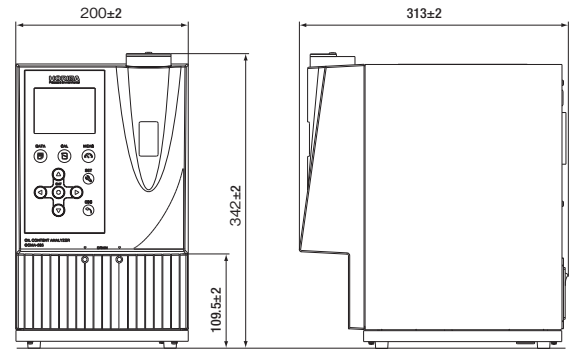
Standard Accessory

- Filter element For water filter, diameter 40mm, 5 in package
- Dropper Polyethylene, 2.5mL
- Code set Power supply cable
- B-heavy oil 10mL
- Instruction Manual

Optional parts

- Solvent S-316
- Measuring syringe set, Standard type
- Measuring syringe set, High repeatability type
- Packing For water filter

Dimensional Outline (unit:mm)



For the first purchase customer

In order to measure oil content with OCMA-500, you need the following products.
If you don't have these products, please purchase from optional parts list

OCMA-500



Solvent(S-316)



Measuring Syringe Set



or



Standard

High repeatability type



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

- The contents of this catalog are subject to change without prior notice, and without any subsequent liability to this company.
- The color of the actual products may differ from the color pictured in this catalog due to printing limitations.
- It is strictly forbidden to copy the content of this catalog in part or in full.
- All brand names, product names and service names in this catalog are trademarks or registered trademarks of their respective companies.

<http://www.horiba.com> e-mail: info@horiba.co.jp

● HORIBA, Ltd.

Head Office
2 Miyanohigashi, Kisshoin
Minami-ku, Kyoto, Japan
Phone: 81 (75) 313-8121
Fax: 81 (75) 321-5725

Tokyo Sales Office
Kanda-Awaji-cho Nichome
Building 2-6, Awaji-cho,
Kanda, Chiyoda-ku, Tokyo,
Japan
Phone: 81 (3) 6206-4721
Fax: 81 (3) 6206-4730

● HORIBA (China) Trading Co., Ltd.

Shanghai Office
Unit D, 1F, Building A, Synnex
International Park, 1068
West Tianshan Road,
Shanghai, 200335 China
Phone: 86 (21) 6289-6060
Fax: 86 (21) 6289-5553

Beijing Office
12F, Metropolis Tower, No.2,
Haidian Dong 3 Street,
Beijing, 100080, China
Phone: 86 (10) 8567-9966
Fax: 86 (10) 8567-9066

● HORIBA Korea Ltd.

10, Dogok-Ro, 6-Gil,
Gangnam-Gu, Seoul,
135-860, Korea
Phone: 82 (2) 753-7911
Fax: 82 (2) 756-4972

● HORIBA Instruments (Singapore) Pte Ltd.

Head Office
10, Ubi Crescent #05-12
Lobby B Ubi Techpark
Singapore 408564
Phone: 65 (6) 745-8300
Fax: 65 (6) 745-8155

Hanoi Office
Unit 10, 4 Floor, CMC tower,
Duy Tan Street, Dich Vong
Hau Ward, Cau Giay district,
Hanoi, Vietnam
Phone: 84 (4) 3795-8552
Fax: 84 (4) 3795-8553

● PT HORIBA Indonesia

Jl. Jalur Sutera Blok 20a,
No.16-17, Kel.Kunciran,
Kecamatan Pinang,
Tangerang - 15144
Phone: 62 (21) 3044-8525
Fax: 62 (21) 3044-8521

● HORIBA India Private Limited

Delhi Office
246, Okhla Industrial Estate,
Phase 3 New Delhi - 110020,
India
Phone: 91 (11) 4646-5000
Fax: 91 (11) 4646-5020

● HORIBA Instruments Incorporated

Pune Office
502, 5th Floor, Purushottam
Plaza, Baner Road, Baner,
Pune - 411045 India
Phone: 91 (20) 4076-6000
Fax: 91 (20) 4076-6010

Irvine Office
9755 Research Drive,
Irvine, CA 92618, U.S.A.
Phone: 1 (949) 250-4811
Fax: 1 (949) 250-0924

Alvin, TX Office
5318 W.FM517 Rd, Alvin,
TX 77511, U.S.A.
Phone: 1 (281) 482- 4334
Fax: 1 (281) 614-0303

● HORIBA Instruments Brasil, Ltda.

Avenida das Nacoes Unidas,
21.735 PT QD 17 - Jurubatuba
- Sao Paulo - SP - CEP
04795-100 Brazil
Phone: 55 (11) 55 45 1500
Fax: 55 (11) 55 45 1570

● HORIBA UK Limited

Northampton Office
Kyoto Close
Moulton Park, Northampton
NN3 6FL, UK
Phone: 44 (1604) 542-500
Fax: 44 (1604) 542-699

● HORIBA (Austria) GmbH

Kaplanstrasse 5
A-3430 Tulln,
Austria
Phone: 43 (2272) 65225
Fax: 43 (2272) 65230

HORIBA Czech
Petrohradská 13,
CZ-10100 Praha 10,
Czech Republic
Phone: 420 (2) 460-392-65

● HORIBA Europe GmbH

Head Office
Hans-Mess-Str.6
D-61440 Oberursel
Germany
Phone: 49 (6172) 1396-0
Fax: 49 (6172) 1373-85

Leichlingen Office
Julius-kronenberg Str.9
D-42799 Leichlingen
Germany
Phone: 49 (2175) 8978-0
Fax: 49 (2175) 8978-50

● HORIBA France Sarl

12. Av des Tropiques Hightec
Sud, F-91955 Les Ulis,
France
Phone: 33 (1) 69-29-96-23
Fax: 33 (1) 69-29-95-77

Bulletin:HRE-1938A

Printed in Japan TS-M(SK)23