

Portable Oil Moisture Meter / Data logger

Advanced Moisture Analysis for Optimal Oil Management

Model : POM - 203



INTRODUCTION

In the realm of industrial operations, the health of machinery and equipment is a critical factor that directly impacts productivity, efficiency, and profitability. Lubricating oils are the lifeblood of mechanical systems, reducing friction, dissipating heat, and preventing wear and tear on moving parts. However, the presence of moisture in these oils can have detrimental effects, leading to accelerated corrosion, reduced lubrication effectiveness, and ultimately, equipment failure.

Moisture ingress can occur through various means—be it condensation due to temperature fluctuations, leaks in seals or gaskets, or contamination during storage and handling. Even minimal amounts of water can significantly compromise oil quality, promoting oxidation and acid formation, which deteriorate both the oil and the machinery it is meant to protect.

The **Portable Oil Moisture Meter** is specifically engineered to address this challenge by providing accurate, on-the-spot measurements of moisture content in oils. This sophisticated instrument empowers maintenance professionals, engineers, and quality control specialists to detect and quantify moisture levels promptly, enabling proactive maintenance strategies and informed decision-making.

Incorporating the Portable Oil Moisture Meter into your maintenance toolkit means investing in the longevity and reliability of your machinery. By accurately monitoring oil moisture content, you can prevent unplanned downtime, reduce maintenance costs, and enhance the overall efficiency of your operations.

KEY FEATURES

- ✓ **Wide Measurement Range: Temperature:** 0 to +100 °C, **Relative Saturation (RS):** 0 to 100% RS, **Water Activity (aw):** 0 to 1 aw
- ✓ **High Resolution:** 0.01 °C / % RS & 1 aw for precise readings.
- ✓ **Intuitive Display:** 2.8" True Colour TFT touch screen for easy operation.
- ✓ **Data Recording:** Huge Logging Memory upto 16 GB
- ✓ **Data Logging:** User-selectable intervals from 1 second to 24 hours.
- ✓ **Connectivity:** USB C-type port for data download via PC software (Sansel-Soft-01).
- ✓ **Alarm Functions:** Audible and visible alarms with user-settable thresholds.
- ✓ **Robust Design:** Durable ABS housing with anti-slip grip and IP40 protection class.
- ✓ **Portable:** Compact dimensions and lightweight design for easy transport.

Experience precision and reliability with our Portable Oil Moisture Meter—your essential partner for maintaining optimal oil quality and ensuring the longevity of your equipment.

By integrating this advanced tool into your workflow, you can proactively manage oil moisture levels, prevent equipment failures, and optimize operational efficiency.

Applications

- ❑ **Machinery Maintenance:** Quickly checks moisture levels in lubricating oils to prevent equipment wear and corrosion.
- ❑ **Hydraulic Systems:** Monitors moisture in hydraulic oils to avoid system malfunctions and ensure smooth operation.
- ❑ **Transformer Oil Testing:** Measures moisture content in transformer oils to maintain electrical insulation and prevent failures.
- ❑ **Quality Control:** Ensures oils meet required moisture specifications during production and before use.
- ❑ **Field Inspections:** Allows on-site moisture assessment of oils without the need for lab analysis.
- ❑ **Research and Development:** Supports studies on how moisture affects oil performance and aids in developing better oil formulations.
- ❑ **Automotive and Aerospace:** Checks moisture in oils used in vehicles and aircraft to ensure safety and optimal performance.
- ❑ **Environmental Monitoring:** Assists in analyzing moisture in used oils for recycling or disposal decisions.

Technical Specifications

Parameter	Specification
Measurement Range - Temperature (T) - Relative Saturation (RS) - Water Activity (aw)	-20 to +100 °C 0 to 100% RS 0 to 1 aw
Resolution	0.01 °C / % RS & 1 aw
Accuracy - aw (0...0.9 aw) - aw (0...1.0 aw) - Temperature	±0.02 aw at 23 °C Typically ±0.03 aw at 23 °C ±0.3 °C
Display	2.8" True colour TFT display with touch screen
Display refresh rate	1 second (typical)
Data Logging Interval	1 sec to 24 Hours (user selectable)
Data download	Via USB Type-C to PC software (Sansel-Soft-01)
Calibration	2 point calibration for both temperature and humidity
Alarm	Audible & visible user-settable high & low alarms for all parameters
Touch sound	On / Off option available
Integrated battery	3.7 V / 10,000 mAh rechargeable polymer Li-ion battery
Battery charging port	USB C-type
Backlight time interval	Adjustable from 0(OFF) to 59 minutes and 59 seconds
Brightness adjustment	10% to 100% (user adjustable)
Application Environment Range - Temperature - Humidity	-10 to 60 °C 0 to 100% RH (non-condensing)
Storage environment range - Temperature - Humidity	-10 to 45 °C 10 to 90% RH
Housing Material	ABS with anti-slip grip silicon cover
Protection class	IP40
Overall Dimension (L x B x H)	35 x 80 x 165 mm
Instrument Weight	560 g (Approx.)

Note: Specifications are subject to change without notice.

Included Accessories

- USB C-Type Data Cable
- Calibration Certificate
- User Manual
- Protective Carrying Case

Optional

- ISO/IEC 17025 Accredited Calibration Certificate
- PC Interface Software

SANSEL INSTRUMENTS AND CONTROLS

SANSEL CALIBRATION LABORATORIES

ISO/IEC 17025 Accredited Calibration Laboratory by NABL CC - 2879
 (Thermal, Mechanical, Electro-Technical, Dimension Parameters)

1 / 46 , 3rd Main road, Ganga Nagar, MMDA Colony , Maduravoyal , Chennai - 600 095. INDIA

☎ +91 44 2378 3951, 📞 +91 72999 72085 / 86 / 93, 📠 +91 98401 49928 ✉ enquiry@sansel.net

🌐 www.sansel.net

🌐 www.sansel.in

🌐 www.sansel.co.in

🌐 www.calibrators.in

