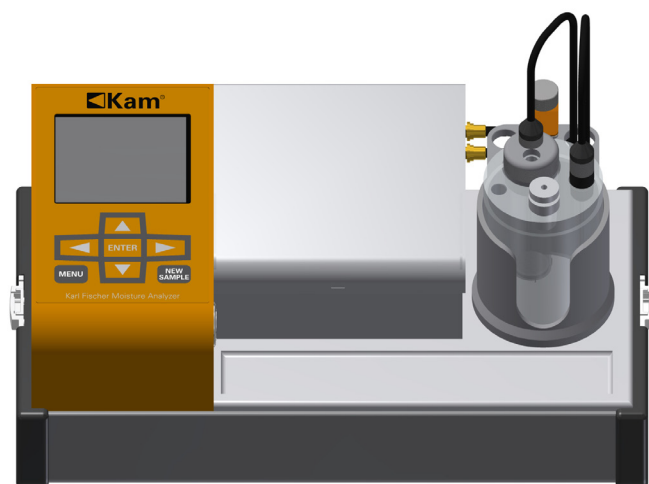


APPLICATION: DETERMINATION OF MOISTURE IN TRANSFORMER OILS

The KAM® KF Karl Fischer Moisture Analyzer is a key component of preventative maintenance with transformer oils. The presence of moisture in transformer oils reduces the dielectric strength of the oil and accelerates the degradation of paper insulation. Therefore, periodic testing for moisture is an important diagnostic tool for system integrity and longevity. Because of its high degree of accuracy with very low water levels, coulometric Karl Fischer titration is the preferred methodology for determination of water in transformer/insulating oils.

KAM has been manufacturing Karl Fischer coulometric titrators for over 30 years. KAM units are in use across the globe in a wide variety of field and laboratory applications.



KAM® KF
Karl Fischer Moisture Analyzer
PER ASTM D1533



KAM® Reagents

KEY FEATURES

- Data storage for up to 100 samples
- USB port
- Fully portable with 10-hour battery life
- Automatic reagent expiration notification
- Consumables storage
- Bluetooth®
- Windows based software
- Spanish/English menu options
- Optional printer

KAM sells the highest quality reagents available, pre-measured to the proper volumes for immediate use and quick replacement

STEPS

1. Turn the unit on. The main menu will appear on the display.
2. On the menu items, ensure that Sample Size reads "1.0" and Titration Mode reads "ml."
3. Navigate to "Start Titration" and press "Enter." The unit will automatically titrate any ambient moisture in the reagent and beep when complete.
4. After fully flushing syringe with the sample three times, draw the sample into the syringe slightly beyond the 1 ml mark.
5. Slowly depress plunger to expel the extra fluid and air bubbles. Stop when fluid level exactly meets the 1 ml marker.
6. Press "New Sample" on the keyboard. A countdown will begin, and you will have a thirty-second window to inject the sample.
7. Insert the tip of the needle into the sample injection port and inject the sample into the reagent.
8. Titration begins automatically. When it is done the machine will beep. Sample value will be displayed as well as recorded in the unit by date and time.

See KAM KF User Manual for full instructions. Analysis should be conducted in accordance with ASTM test method D1533 at all times.

SPECIFICATIONS

Method:	Coulometric Karl Fischer titration
Detection:	Polarization detection
Control:	Automatic electrolysis current control
Display:	320 x 240 LCD
Sample size:	0.1, 0.25, 0.5, 1.0 ml or less than 2 grams (or ml)
Range:	10 µg - 100,000 µg H ₂ O
Sensitivity:	1 µg H ₂ O
Accuracy:	±5 µg for 10 µg - 1000 µg, 0.5% (C.V.) for over 1000 µg (meets or exceeds API MPMS 10.9, ASTM D4928, ISO 12937, and EI 386)
Generator	
Electrode Config.:	With diaphragm
Titration speed:	1000 µg H ₂ O/min. (max. at high H ₂ O concentrations)
Power requirements:	Operates on either AC or DC. AC- 110/120, 220/240 V, 50/60 Hz 12V rechargeable lithium battery
Ambient Temperature	5°C – 40°C
Communication:	USB port, Bluetooth [®] , Windows based software
Printer:	Optional
Dimensions:	Portable 15.5" x 8" x 10" (394 mm x 203 mm x 254 mm) Lab 10.5" x 8" x 9" (267 mm x 203 mm x 229 mm)
Weight:	Approx. 16 lbs. (9 kg)

FOR MORE INFORMATION ON KAM PRODUCTS

Phone: +1 713-784-0000

Fax: +1 713-784-0001

Email: sales@kam.com

www.KAM.com

KAM CONTROLS, INC.
3939 Ann Arbor Drive
Houston, TX 77063 USA

KAM CONTROLS IS AN ISO 9001 CERTIFIED COMPANY