Kam[®] KF Karl Fischer Moisture Analyzer



APPLICATION: DETERMINATION OF MOISTURE IN ETHANOL AND HYDROCARBON BLENDS BY COULOMETRIC KARL FISCHER MOISTURE ANALYSIS PER ASTM D7923

The KAM® KF Karl Fischer Moisture Analyzer is a key instrument for detecting low quantities of water in ethanol and hydrocarbon blends per ASTM D7923. Using the coulometric method, the KAM® KF meets both repeatability and reproducibility requirements for the standard. The unit comes in both portable and laboratory models and uses standard KAM® Reagents and accessories in this application. Steps for sampling handling, volume, etc. per ASTM D7923 should be observed at all times. KAM has been manufacturing Karl Fischer coulometric titrators for over 30 years with units in use across the globe in a wide variety of field and laboratory applications.



KAM® KF
Karl Fischer Moisture Analyzer
PER ASTM D7923



KAM® Reagents

KEY FEATURES

- Data storage for up to 100 samples
- USB port
- Fully portable with 16-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

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STEPS

- 1. Turn the unit on. The main menu will appear on the display. Select sample size based on recommendations in ASTM D7923.
- 2. Navigate to "StartTitration" and press "Enter." The unit will automatically titrate any ambient moisture in the reagent/cathode cell, beeping when complete. Excessive ambient moisture can be removed by gently swirling reagent within the cathode cell.
- 3. Prepare/mix sample per ASTM D7923 requirements. All sample vessels should be completely dry, and it is not recommended to use a mechanical or electric mixer.
- 4. After fully flushing syringe with the sample three times, draw the sample into the syringe slightly beyond the desired volume mark.
- 5. Inverting the syringe, slowly depress plunger to expel the extra fluid and any air bubbles. Stop when the fluid level exactly meets the volume marker.
- 6. Press "New Sample" on the keyboard. 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.

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 H2O

Sensitivity: 1 µg H2O

Repeatability: Meets or exceeds D7923 Reproducibility: Meets or exceeds D7923

Generator

Electrode Config.: With diaphragm

Titration speed: 1000 µg H2O/min. (max. at high

H2O concentrations)

Power requirements: Operates on either AC or DC.

AC- 110/120, 220/240 V, 50/60 Hz 12 V 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

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