

Water Content Tester

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LWT-A10 is fabricated to determine water content in petroleum products and grease according to ASTM D95 “Test Methods for Water Content of Petroleum Products” and ASTM D7303 “Test Methods for Water Content in the Lubricating grease”.

Features:

- Bidirectional Silicon Controlled Rectifier
- Ambient Temperature is less than 35°C
- Relative Humidity is less than 85%
- Less power consumption

Applications:

It is used to determine water content in crude oil, refined petroleum products, fuels, biofuels, lubricants, chemicals, and other products

Specifications:

Model no.	LD-LWT-A10
Dimensions	580 × 350 × 300 mm
Power Supply	AC 220 V ± 10 % 50 Hz
Power Consumption	≤ 1100 W
Relative Humidity	≤ 85 %
Ambient Temperature	≤ 35 °C
Sample Determination	1 at once
Heating Power of Electric Furnace	1000 W

LWT-A11 is fabricated to determine water content in petroleum products and grease according to ASTM D95 “Test Methods for Water Content of Petroleum Products” and ASTM D7303 “Test Methods for Water Content in the Lubricating grease”.

Features:

- Bidirectional Silicon Controlled Rectifier
- Ambient Temperature is less than 35°C
- Relative Humidity is less than 85%
- Less power consumption

Applications:

It is used to determine water content in crude oil, refined petroleum products, fuels, biofuels, lubricants, chemicals, and other products

Specifications:

Model no.	LD-LWT-A11
Dimensions	690 × 570 × 310mm
Power Supply	AC 220 V ± 10 % 50 Hz
Power Consumption	≤ 2200 W
Relative Humidity	≤85 %
Ambient Temperature	≤ 35 °C
Sample Determination	2 at once
Heating Power of Electric Furnace	1000 W × 2

Coulometric Karl Fischer Titrator LWT-A30 is a benchtop unit with 10°C to 35°C ambient temperature range, 0 to 100 mg measurement range, and 10 µg to 1000 µg, ± 2 µg amount of electrolysed water range. Features fast and accurate water content determination with very simple process and portable handling unit. It is in accordance with ASTM D1533 (Standard Test Method for Water in Insulating Liquids by Coulometric Karl Fischer Titration) and ASTM D6304 (Standard Test Method for Determination of Water in Petroleum Products, Lubricating Oils, and Additives by Coulometric Karl Fischer Titration).

Features:

- Capability of saving maximum 255 data
- 240 × 128 pixels dot-matrix LCD screen
- Equipped with Calendar clock, to record date and time
- End point of sample is measured with high electrode precision value with electrolyte blank current and equilibrium point drift compensation adaptation for accurate measurement
- Automatic shutdown LCD screen with screen protection function
- Design with open-circuit fault and short-circuit fault for automatic detecting function of measuring electrode
- Portable and easy handling

Applications:

Coulometric Karl Fischer Titrator is used for the determination of water content in petroleum products and lubricating oils and additives by Karl Fischer titration

Specifications:

Model no.	LD-LWT-A30
Dimension	320 × 240 × 150 mm
Net Weight	5 kg
Resolution	0.1 µg
Power Supply	AC 220 V ± 20 %, 50 Hz
Measurement Range	0 to 100 mg
Relative Humidity	≤ 85 %
Ambient Temperature	10°C to 35°C
Max. Power Consumption	30 W
Max. Electrolysis Speed	40 µg /s
Amount and Precision of electrolysed water	10 µg to 1000 µg, ± 2 µg and >1000 µg, 0.2 %

LWT-B10 is crafted to determine water content in crude petroleum according to ASTM D4006 – Test Methods for Water Content of Crude Petroleum – international standard.

Features:

- Simple Design
- Adjustable Electric Heating Power
- Adopts Heating Mantle

Applications:

It is used to determine water content in crude oil, refined petroleum products, fuels, biofuels, lubricants, chemicals, and other products

Specifications:

Model no.	LD-LWT-B10
Condenser	400 mm ± 5 mm
Dimensions	820 × 500 × 260 mm
Power Supply	AC 220 V ± 10 %, 50 Hz
Water receiver	5 ml
scale division	0.05 ml
Relative Humidity	≤ 85 %
Distillation flask	1000 ml
Ambient Temperature	(-10) °C ~ 35 °C

Coulometric Karl Fischer Titrator LD-LWT-A31 is a benchtop unit with 5 to 40°C ambient temperature range, 3 µg to 9999.9 µg measurement range, and offers 400 mA maximum current. Excellent low-power operation makes it possible to compact battery, enables portable function criterion for measuring electrode signal for the electrolysis end. Its stability and accuracy are key factors affecting the measurement accuracy. Designed with streamline and 5 inch coloured touch screen with standard testing method used ASTM D4928, ASTM D1533 and ASTM D6304 in titration process.

Features:

- Design with streamline and 5 inch coloured touch screen
- Electrolytic process is intelligently controlled completely
- It adopts real-time dynamic impedance method to detect the end point of titration
- Equipped with open-circuit fault, short-circuit fault and measuring electrode
- High-precision, and it has automatic detection function
- Inbuilt thermal printer and end point is settable

Applications:

Coulometric Karl Fischer Titrator is widely used to determine the trace water content in liquid petroleum, chemical engineering, pharmacy, electricity, scientific research and education department.

Specifications:

Model no.	LD-LWT-A31
Dimension	400 × 260 × 180 mm
Net weight	5 kg
Resolution	0.1 µg
Data saving	496 pcs
Precision 1	± 2 µg (3µg H ₂ O to 20µg H ₂ O)
Precision 2	± 3 µg (20µg H ₂ O to 100µg H ₂ O)
Precision 3	≤ 5 % (100µg H ₂ O to 10mg H ₂ O)
Power Supply	AC 220 V±10%, 50Hz ±5 %
Maximum current	400 mA
Built-in printer	Thermal printer
Measurement range	3 µg to 9999.9 µg
Power consumption	50 W
Ambient temperature	5 to 40°C

Calculation formula	8 kinds can be selected
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Karl Fischer Titrator LD-LWT-A40 is a laboratory instrument designed for accurate water content determination using volumetric and coulometric Karl Fischer titration. It supports reliable moisture analysis in gases, liquids, and solid samples, making it suitable for routine laboratory testing. The system provides dependable analytical performance for quality control, research, and testing laboratories requiring precise moisture determination across a wide range of applications.

Features:

- Supports volumetric and coulometric KF titration
- Enables oven sampling for gas, liquid, and solid samples
- Provides auto/manual drift adjustment
- Offers selectable measurement units
- Features a 7-inch colour LCD touchscreen
- Supports three-level user access control
- Enables USB PC communication
- Stores up to 2000 titration records
- Supports RS-232 printer connectivity
- Allows method import and export via USB
- Exports data in CSV and PDF formats
- Supports GMP data management
- Provides intelligent method and data management
- Supports multiple KF titration methods
- Incorporates an anti-leakage solvent management system

Applications:

Suitable for petroleum, chemical engineering, pharmaceutical, and electrical industry laboratories, as well as scientific research and educational institutions for moisture content analysis.

Specifications:

Model no.	LD-LWT-A40
Dimensions	240 × 370 × 270 mm
Net Weight	About 4 kg
Power Supply	AC 100~240 V, 47~63 Hz
Volumetric mV Range	(0~2000) mV
Coulometric mV Range	(0~2000) mV
Volumetric Resolution	1 µg
Volumetric Water Unit	µg, mg, %, ppm, µg/mL, mg/L
Coulometric Resolution	0.1 µg

Coulometric Water Unit	μg, mg, %, ppm, μg/mL, mg/L
Volumetric Water Range	100 μg ~ 250.0 mg
Coulometric Water Range	3.0 μg ~ 200 mg
Volumetric Repeatability	≤0.3%
Volumetric mV Resolution	0.1 mV
Working Current Accuracy	±0.5%
Coulometric Repeatability	≤0.3%
Coulometric mV Resolution	0.1 mV
Working Current Fluctuation	±0.2%/10 min
Volumetric Polarization Current Range	(1~200) μA
Coulometric Polarization Current Range	(1~200) μA
Volumetric Polarization Current Accuracy	±3%
Coulometric Polarization Current Accuracy	±3%
Volumetric Polarization Current Fluctuation	±2.5%/30 min
Coulometric Polarization Current Fluctuation	±2.5%/30 min