

titramax VT WATER

Volumetric water determination in liquids

Product description

With the **Titramax VT WATER** you can determine the water content of liquids very easily. The device is based on volumetric titration according to the Karl Fischer method. The titrator works fast and precise for a wide range of use.

The device is conform to standards **ASTM D 4377, ASTM D 6869, ASTM E 203, DIN 51777, IP 356, IP 471, ISO 10336, ISO 6296, Pharmacopoeia.**

The actual curve and the measurement drift during titration process appear in the display and you can see the titration solvent consumption. Standard methods for different applications are programmed.

The measurement uses a potentiometric titration method in an anhydrous medium. The titration with titrant starts, once the sample is dosed into the reagent. The user has to enter the sample weight into the menu. The titration speed is precisely adjusted to the reaction rate by control algorithms. The titration is performed automatically until the endpoint indication of measurement.

At the end of the measurement, results are shown in ppm water or several other units.



Titramax VT WATER

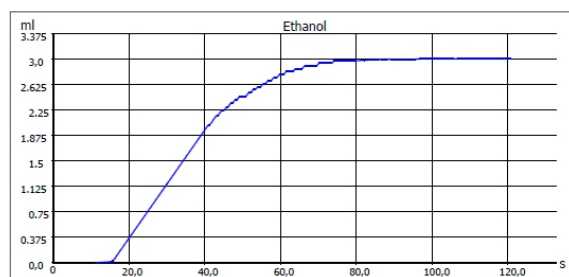
Applications

The titrator is suitable for analysis of water in alcoholic and similar liquids:

- methanol
- isopropyl alcohol
- glycol
- other organic liquids

Advantages

- Complete measuring system for the water determination
- Fully-automatic volumetric titration
- Precise adjustment of the titration parameters by control algorithms
- Preset measurement method allows an immediate start
- The result output can be adjusted to your needs by using a formula generator



Titration graph of ethanol sample

Features

The **Titramax VT WATER** consists of

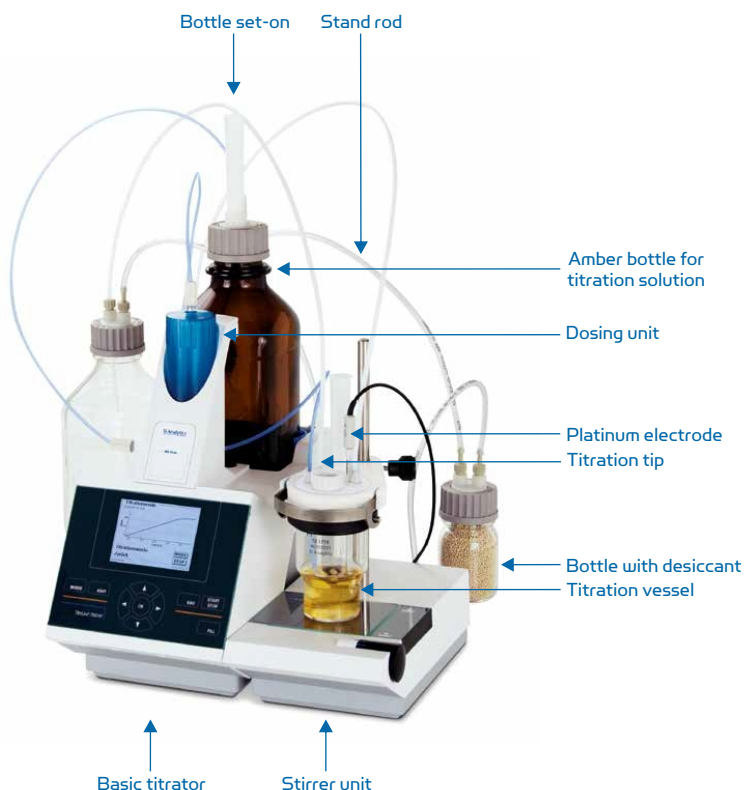
- an automatic volumetric titrator with potentiometric indication
- a titration vessel with stirrer unit

The determination of water content is based on

- a potentiometric titration in an anhydrous medium
- a precise indication by a selective platinum electrode, which is stable over long periods

Steps of the analysis are

1. Titration of blank value - water content of vessel and solvent (conditioning of system)
2. Determination of the titrant concentration with standard
3. Titration of the sample



Technical specifications

Measurement method:

Types of result:

Measuring range / Display resolution:

Measurement range pH / mV:

Display resolution pH / mV:

Accuracy pH / mV (without sensor):

Measurement range μ A:

Display resolution μ A:

Accuracy μ A (without sensor):

Measurement range temperature $^{\circ}$ C:

Amplifier input impedance:

Burette resolution:

Dosing accuracy according DIN EN ISO 8655, part 3: Accuracy 0.15 % / Precision 0.05 - 0.07 % (depending on the used exchange unit)

Filling time:

Power supply:

Power input:

Stirrer connection:

Dimensions:

Weight:

Water determination according to Karl Fischer volumetry

ppm or mg/L or using the formula generator

10 ppm ... 100 % / 0.01 ppm

- 3.0 ... 18.00 / - 2000 ... 2000

0.001 / 0.1

0.002 / 0.1 mV \pm 1 digit

0 ... 100

0.1

0.2 \pm 1 digit

- 75 ... 175

> 1 \cdot 10¹³ ohms

10,000 steps for 10 mL / 20 mL \pm 0.15 %

Dosing accuracy according DIN EN ISO 8655, part 3: Accuracy 0.15 % / Precision 0.05 - 0.07 % (depending on the used exchange unit)

20 sec

External plug-in power supply 100 - 240 V, 50/60 Hz

30 VA

12 V DC out, 500 mA

30 x 45 x 30 cm (W x H x D), height with exchange unit

Approx. 3.5 kg (with exchange unit and empty reagent bottle)

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