870 KF Titrino plus



Water determination easy, safe and precise



### 02 Intuitive and easy operation

The favorably priced 870 KF Titrino plus is Metrohm's Karl Fischer titrator for volumetric water determinations. It can be used to determine water contents from a few ppm up to 100% reliably and accurately in solid, liquid and gaseous samples. With its operating interface designed for routine users, the 870 KF Titrino plus is so easy to operate that it only requires a short familiarization period. Also its robustness makes it the ideal titrator for routine determinations.



### The advantages of the 870 KF Titrino plus at a glance

#### Very simple installation

The installation of the 870 KF Titrino plus is extremely simple. As soon as they are connected, the Exchange Unit, stirrer and compact USB printer are recognized and configured automatically.

#### Ready-to-use methods simplify your work

You only have to decide whether you want to carry out a titer, blank or water determination and then start the titration by pressing just one key. Of course, you can also adapt the parameters yourself to your sample.

#### Formulas included

The appropriate calculation formulas for each method are stored in the titrator. All you have to do is select the units for entering the sample weight and presenting the results; the 870 KF Titrino plus informs you about the necessary conversion factors.

#### Mouse or keyboard – choose your favorite!

The 870 KF Titrino plus can be controlled either by mouse-click or keyboard – the choice is yours.

#### **Highlights**

- Straightforward installation
- Easy operation thanks to predefined methods
- Excellent precision thanks to the high-resolution measuring input
- Live curve for recognizing side-reactions
- Overflow protection for increased workplace safety
- Compact USB printer as an option





## Precision you can rely on

#### **Highest precision**

Just like the Titrando high-end titrator, the KF titrator Titrino plus is also equipped with a high-resolution measuring input that guarantees results of the highest precision.

#### The live curve allows you to recognize sidereactions

Metrohm KF titrators are equipped with a display showing the live curve as standard. This allows you to recognize side-reactions in good time and take measures to suppress them.

#### Intelligent Exchange Unit for more comfort

The chip of the intelligent Metrohm Exchange Unit automatically provides the titrator with all the data (cylinder volume, type of KF reagent, validity of titer, etc.) that is necessary to carry out an error-free titration. This means that you always titrate under optimal conditions and, for example, do not have to repeat measurements because the determination has been carried out with an invalid titer.



# Workplace safety is a priority

#### Overflow protection improve workplace safety

Great importance has been given to workplace safety: The new titrator allows safe handling of Karl Fischer reagents. The new safety parameter «Conditioning options» prevents the titration cell from overflowing during conditioning.

#### **Environmentally friendly**

Like all Metrohm KF titrators, the 870 KF Titrino plus can also be used with ethanol-based Karl Fischer reagents without any problems.

#### The 803 KF Titration Stand

The 803 KF Titration Stand is used for stirring and for exchanging the used working medium. The built-in pump aspirates off the used titration solution and adds new working medium without the cell having to be opened. This shortens the conditioning time and prevents the escape of solvents and their accumulation in the lab atmosphere.



# 870 KF Titrino plus – overview

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Dosing elements	Exchange Units
Intelligent Exchange Units with integrated data chip	•
Steps per cylinder volumne	10′000
Operation, dialog	Keyboard and mouse
Stirrer, titration stand	803 KF Titration Stand
	801 Magnetic Stirrer as an option
Stirrer connection	1 MSB connection
	(Metrohm Serial Bus, Daisy Chain)
Connections of balances, printer, USB keyboard,	Via 1 USB Slave Port,
USB mouse, USB memory stick and barcode reader	RS-232/USB Box (option)
Live curve display with graphic LCD	•
KF volumetric Karl Fischer titration with automatic	•
conditioning	
$I_{pol}$ and $U_{pol}$ – integrated programmable polarizer	•
Predefined methods including calculation formulars	•
Dialog language	Englisch, german, french, spanish, portugese, italian
Comprehensive GLP-/GMP funktions	•

# Ordering information, options

2.870.0010	870 KF Titrino plus with one measuring interface, including comprehensive accessories with
	that and the section discussion discussion and the section discussion discussion and the section discussion di
2.803.0010	803 KF Titration Stand with stirrer and integrated membrane pump for reagent exchange
2.870.1010	870 KF Titrino plus with titration unit, indicaton electrode, 803 Titration Stand and 10 mL exchange unit
2.870.1020	870 KF Titrino plus with titration unit, indicaton electrode, 803 Titration Stand, 10 mL exchange unit
	and USB thermal printer Neo's
2.870.2010	Pachage including 870 KF Titrino plus, 860 KF Thermoprep and 803 Titration Stand
	Intelligent Exchange Units equipped with data chip, including accessories and
	two buret tips, one of them with micro outlet valve.
6.3026.110	Buret volumen 1 mL
6.3026.150	Buret volumen 5 mL
6.3026.210	Buret volumen 10 mL
6.3026.220	Buret volumen 20 mL
	Options for connecting a balance
6.2148.020	RS-232/USB Box
6.2151.030	Cable USB A – USB B
	Optional compact USB printer
2.142.0100	Thermoprinter Custom Q3X
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# The optimal solution for every task



901 Titrando – volumetric high-end titrator for demanding KF titrations.



The 851 and 852 Titrando for water content determinations in the trace region. The picture shows the 851 Titrando.



The Karl Fischer oven technique for the easy preparation of difficult samples. The picture shows the 860 KF Thermoprep with manual sample preparation.



High sample throughputs are best dealt with by the fully automated 874 Oven Sample Processor. In the picture with 851 Titrando.

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