

# aquamax KF Plus

## in-lab ppm water content

### Product Description

Aquamax KF Plus titrators have been specifically designed for the determination of water content, combining coulometry with the Karl Fischer method.

The versatile Aquamax KF Plus is suitable for a wide range of applications and offers many advantages including a tough measuring vessel, a 'press go' keypad and built-in printer.



Water check button and syringe

### Water Check

The ug check button allows the operator to simply press go, inject 1ul or maybe 10ul of distilled water (as required by some ASTM methods) and verify if the instrument and reagent are working with in their required specification. The ug check overrides the programmed calculation and displays/prints out a report of the verification check. The coulometer then automatically reverts back to the pre-programmed setting.

### Tough measuring vessel

The unique LDC glassware design is by far the easiest to use and also the most robust. The electrode locking system allows the joints to seal completely, without the use of grease or PTFE sleeves, and provides improved baseline stability. Hassle free assembly and disassembly.



### Single shot Karl Fischer Reagent

Aquamax KF Reagent A is a general coulometric KF anolyte for use with generator electrodes which incorporate a frit or diaphragm to separate the anode and cathode chambers. Used in conjunction with Reagent C this formulation is supplied in a pack of 8 x 100ml bottles, 8 x 5ml cathode vials, all conveniently located in a single carton.

To conform to ASTM, API, EI, ISO (plus others) methodology for water content determination of oil and petroleum products, the anode reagent must be modified with xylene to improve sample solubility and miscibility.

Aquamax KF Reagent is pre-mixed with xylene, and other solubilizers to eliminate side reactions, so that the operator does not have to store or mix chemicals.



## Features

- Simple operation
- 10 user programmable methods
- 1ppm / 100%
- Results in ppm, mg/kg, % & µg water
- Multi language display & print out
- Small footprint
- Integral high speed printer
- Integral battery
- Fully portable
- Low drift cell design
- Results Manager software
- Automatically compensated errors (patented technique)

## Results Manager

Time	Cell	Vol	Volume	Density	Result	Flag
07:46:50	8	0.97	1.8000	0.9700	10.35	
07:47:43	8	0.81	1.8000	0.8700	10.33	
07:48:37	8	0.50	1.8000	0.8200	10.30	
07:49:29	8	0.67	1.8000	0.8200	10.43	

This is a windows application that allows you to view and print sets of results created by the Aquamax KF Titrator. It can download results directly from the instrument via a serial port connection, or open result files previously saved to disk. The Results Manager package contains all necessary cables, connections, installation cd and user manual.



For those who need to use the titrator outside of the laboratory, the removable flash drive (memory stick) will store all the results whilst you complete your on-site work. The USB flash drive can then be connected to a pc and results downloaded via Results Manager when returning to your work place.

## Technical Specifications of Aquamax KF Plus - Part No: 90.18.0001

**Titration Method:** Coulometric Karl Fischer titration  
**Electrolysis Control:** Patented "ACE" control system GB2370641  
**End Point Detection:** AC polarisation  
**End point indication:** Visual display/print out/acoustic beep  
**Titration vessel:** Low Drift Cell design, no grease or PTFE sleeves required  
**Measuring range:** Possible 1µg - 200mg water  
 Typical 1µg - 10mg water  
**Moisture range:** 1ppm - 100% water  
**Max. sensitivity:** 0.1µg  
**Max. titration speed:** 2.24 mg per minute  
**Max. current:** 400 ma  
**Drift compensation:** Automatically controlled  
**Precision:** 10-100µg ± 3µg, 100µg-1mg ±3µg, above 1mg ±0.3%  
**Start delay time:** 0-30 minutes, user selectable  
**End delay time:** 0-30 minutes, user selectable  
**Calculation modes:** Weight/weight, (W/w) (user programmable)  
 Weight/dilution ratio, (W/K)  
 Volume/density, (V/SG)  
 Volume/volume, (V/v)  
**Display format:** µg, mg/kg, ppm, %  
**Print format:** µg, mg/kg, ppm, %

**Statistics:** max, mean, min values up to 99 runs  
**Method storage:** 10 user programmable methods  
**Sample ID number:** User programmable  
**Stirrer speed:** Microprocessor controlled  
**Languages:** Multi languages – user selectable  
**Calendar/clock:** Analysis time & date print out  
**Battery low indicator:** Display & print out indication  
**Data outputs:** USB and RS232 ports  
**Removable Data storage:** Flash drive (memory stick)  
**Data Entry:** 15 key touchpad  
**Display:** 40 character alphanumeric backlit LCD  
**Printer:** 42 character high speed thermal printer  
**Power supply:** 90-264V AC, 47-63 Hz.  
**Dimensions:** 290 x 255 x 130 mm  
**Weight:** 3.0 k

## Certificates

All Aquamax KF Coulometric titrators are supplied with a calibration certificate traceable to national standards. For additional technical information, specifications, MSDS data, user manuals, and exhibition news, email us at [info@echscientific.com](mailto:info@echscientific.com)

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