

Metrohm Water Solutions



Order before June 30, 2012 and get

- 1 x MagIC Net™ software
 - 1 x Ultrafiltration equipment
 - 1 x Metrosep A Supp 7 – 250/4.0 column
 - 1 x Inline Eluent Preparation equipment
- absolutely FREE!!!

All-in-one IC Systems for
professional water analysis





Water Solutions

Metrohm Water Solutions – a great opportunity not to be missed!

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Metrohm has become synonymous with water analysis. From quality control of drinking water to monitoring industrial waste waters to determining ultra traces in cooling waters – our ion chromatographs set the new standard in precision, ease of use and reliability.

If you have been thinking about investing in ion chromatography, replacing your old Metrohm ion chromatograph or exchanging a third party instrument for a Metrohm system, it has never been a better time:

From February 1, 2011 through June 30, 2012, we are offering three all-in-one systems that are 100% geared to the requirements of professional water analysis. And best of all, during this time we'll throw in

- **our MagIC Net™ software**
- **the Ultrafiltration equipment**
- **a Metrosep A Supp 7 – 250/4.0 column**
- **the Inline Eluent Preparation equipment**

absolutely FREE!!!*

Do not miss this opportunity and benefit from Swiss-made quality at an exceptional price and value!



*with Water Analysis Complete only, see page 8 of flyer.

Solution I: Water Analysis Basic

Straightforward determination of standard anions in drinking water, waste water, etc.

This system is the ideal solution for routine analysis of standard anions in different water matrices. Equipped with Metrohm Inline Ultrafiltration*, Water Analysis Basic spares you the manual clean up of your samples saving valuable time and money. With the appropriate column, this system may also be used to determine cations.

- 1 x 882 Compact IC plus – Anion – MCS
- 1 x 850 Professional Detector
- 1 x 863 Compact IC Autosampler including sample rack, sample vessels and caps
- 1 x IC equipment for Inline Ultrafiltration
- 1 x Metrosep A Supp 5 – 150/4.0
- 1 x Metrosep A Supp 4/5 Guard/4.0

+ Free
• **MagIC Net™ Compact**

MagIC Net

User benefits

- Very compact, fully automated system
- Simple and intuitive operation
- Self-monitoring components (iColumn, iPump, etc.)
- Complies with GLP and FDA requirements
- Inline Ultrafiltration included

Ordering number: 2.882.8030



* Detailed information on Metrohm Inline Ultrafiltration on page 10

Applications

Parameter	Standard Method	Title
Anions, e.g. fluoride, chloride, bromide, nitrite, nitrate, phosphate, sulfate	EPA 300.1 Part A	Determination of inorganic anions in drinking water by ion chromatography
	ASTM D 4327-03	Standard test method for anions in water by chemically suppressed Ion chromatography
	DIN EN ISO 10304-1 2009	Water quality – determination of dissolved anions by liquid chromatography of ions – Part 1: determination of bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulfate
	AOAC 993.30	Inorganic anions in water
	AOB C-003-1	Anions by ion chromatography
	APHA 4110 B	Ion chromatography with chemical suppression of eluent conductivity
	APHA 4500-BR-C	Bromide in water by ion chromatography
	APHA 4500-CL-F	Chloride in water by ion chromatography
	Illinois State Water Survey	Method 300.6 chloride, orthophosphate, nitrate and sulfate in wet deposition by chemically suppressed Ion chromatography
	SLMB 631.1	Determination of chloride, nitrate und sulfate in drinking water by ion chromatography



Solution II: Water Analysis Advanced

Straightforward determination of standard anions and oxyhalides in drinking water, waste water, etc.

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At the heart of this state-of-the-art system is the 881 Compact IC pro – Anion – MCS. While this system allows the determination of standard anions in water, it is also geared to determine oxyhalides as stipulated by EPA method 300.1. Oxyhalides (chlorate, chlorite and bromate) are disinfection-by-products. Bromate is suspected to be a potential carcinogen.

High sample throughput on this system is provided by an 858 Professional Sample Processor that comes with a rack accommodating 54 11-mL-vials. With the appropriate column, this system may also be used to determine cations.

- 1 x 881 Compact IC pro – Anion – MCS
- 1 x 850 Professional Detector
- 1 x 858 Professional Sample Processor
- 1 x Sample rack: 54 x 11 mL, 1 x 300 mL
- 1 x PP Sample vessels 11 mL, 200 pc.
- 1 x PP Sample vessel caps, 200 pc.
- 1 x Metrosep A Supp 7 – 250/4.0
- 1 x Metrosep RP 2 Guard/3.5

+ Free

- MagIC Net™ Compact
- Ultrafiltration equipment

Ordering number: 2.881.8030



Applications

All parameters included in the table on page 5 plus the following:

Parameter	Standard Method	Title
Oxyhalides (e.g., bromate, chlorite, chlorate) and bromide	ASTM D 6581-08	Standard test methods for bromate, bromide, chlorate, and chlorite in drinking water by suppressed ion chromatography
	DIN EN ISO 10304-4	Water quality – determination of dissolved anions by liquid chromatography of ions – Part 4: determination of chlorate, chloride and chlorite in water with low contamination
	EPA 300.1 Part B	Determination of inorganic anions in drinking water by ion chromatography
	SLMB 658.1	Determination of chlorite and chlorate in drinking water



- User benefits**
- Very compact system
 - Simple and intuitive operation
 - Self-monitoring components (iColumn, iPump, etc.)
 - Complies with GLP and FDA requirements
 - Fully automated sample preparation by Inline Ultrafiltration
 - Optimal separation by column temperatures up to 70 °C

Solution III: Water Analysis Complete

Straightforward determination of standard anions, oxyhalides and cations in drinking water, waste water, etc.

This all-in-one system exemplifies the state-of-the-art in water analysis by ion chromatography. Besides the standard anions and oxyhalides, this system also enables the parallel detection of cations.

With Water Analysis Complete, the ultimate capabilities and flexibility of Metrohm's intelligent ion chromatography are at your disposal: you can implement alternative detection methods such as UV/VIS, you can run gradient applications and you can heat up or cool down the column, as required by the application.

An 858 Professional Sample Processor and a rack with 148 positions for 11 mL samples means even large sample series can be processed fast and completely unattended.

- 1 x 850 Professional IC AnCat – MCS
- 2 x 850 Professional Detector
- 1 x 858 Professional Sample Processor
- 1 x Sample rack: 148 x 11 mL + 3 x 300 mL
- 1 x PP Sample vessels 11 mL, 200 pc.
- 1 x PP Sample vessel caps, 200 pc.
- 1 x Metrosep RP 2 Guard/3.5
- 1 x Metrosep C 4 – 150/4.0
- 1 x Metrosep C 4 Guard/4.0



Ordering number: 2.850.8130



Applications

All parameters included in the tables on page 5 and 7 plus the following:

Parameters	Standard Method	Title
Cations, e.g. lithium, ammonium, sodium, potassium, calcium, magnesium	ASTM D 6919-03	Standard test method of dissolved alkali and alkaline earth cations and ammonium in water and wastewater by ion chromatography
	DIN EN ISO 14911:1998	Water quality – determination of dissolved Li, Na, ammonium, K, Mn(II), Ca, Mg, Sr and Ba using ion chromatography – method for water and waste water



User benefits

- Intelligent and compact system with maximum flexibility
- Simple and intuitive operation
- Self-monitoring system components (iColumn, iPump, etc.)
- Complies with GLP and FDA requirements
- Fully automated sample preparation by Inline Ultrafiltration
- Inline Eluent Preparation
- Optimized applications by heated up or cooled down separation columns
- Gradient applications

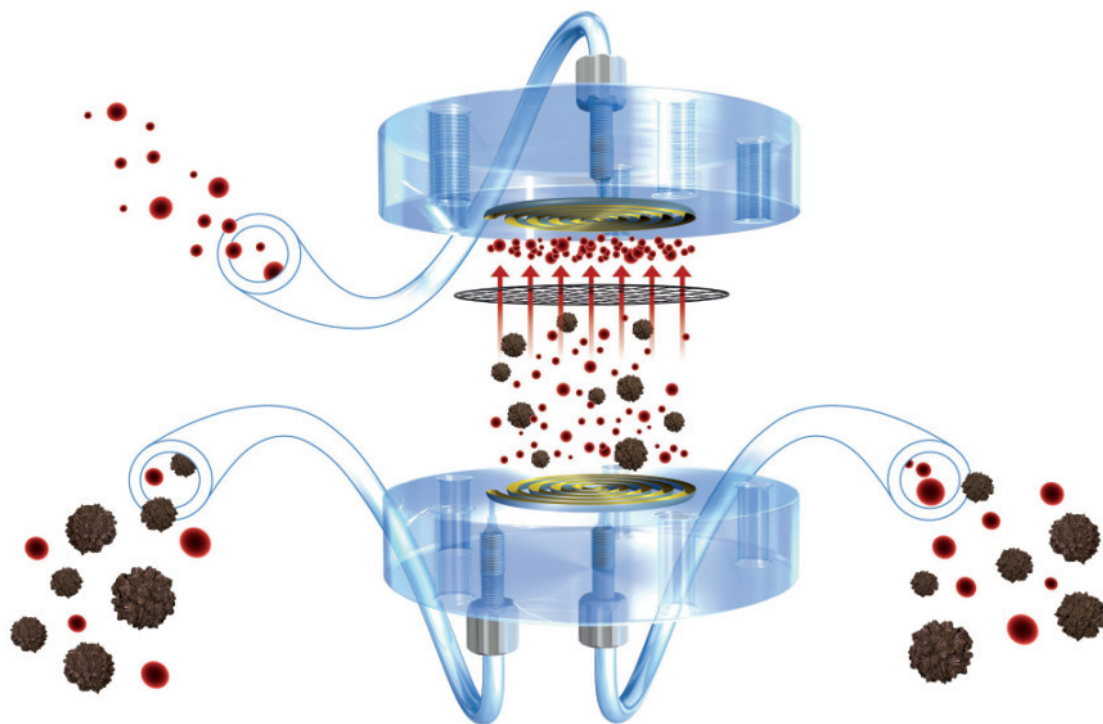
Metrohm Inline Ultrafiltration: Fully automated sample preparation of contaminated water samples

Water samples are all too often loaded with particles, algae or bacteria. In order to avoid damage to the separation column, these particles must be removed from the sample prior to analysis. This is exactly what Metrohm Inline Ultrafiltration does most effectively: Metrohm Inline Ultrafiltration combines sample delivery with ultrafiltration in a single, fully automated procedure.

Your benefits

- Protection of the separation column
- Fully automated sample preparation
- Low maintenance (occasional replacement of filter membrane)
- Low cost of ownership (no syringe filters necessary)

For more information on automated sample preparation for IC go to <http://misp.metrohm.com>



The Metrohm Inline Ultrafiltration cell: On one side the sample is carried through the cell. On the other side some of the sample is drawn off through the membrane and transported to the injection valve.



Metrohm ...

- is the global market leader in titration
- is the only company to offer a complete range of ion analysis equipment – titration, voltammetry and ion chromatography
- is a Swiss company and manufactures exclusively in Switzerland
- grants a 3-year instrument warranty and a 10-year warranty on chemical suppressors for ion chromatography
- provides you with unparalleled application expertise
- offers you more than 1300 applications free of charge
- supports you with expert service through local representatives and regional support centers
- is not listed on the stock exchange, but is owned by a foundation
- gives the interest of customers and employees priority over maximizing profit

water.metrohm.com