

The right chemistry The right choice

Thermo Scientific Dionex
ion chromatography
product portfolio



The right choice for any IC challenge

Do you depend on ion chromatography (IC) to stay ahead of a growing workload of food or environmental samples? To characterize and better understand pharmaceutical products? To optimize manufacturing processes? Or to take a groundbreaking research study to the next level? Wherever IC plays a role in your science, we're ready to help.

Thermo Scientific™ Dionex™ Inuion™ Core IC system

A robust, efficient platform that is easily configurable and economically upgradeable.



Thermo Scientific™ Dionex™ Inuion™ IC system

A system that makes ion analysis simpler and more intuitive than ever, while delivering consistently excellent results with greater day-to-day consistency.



With today's widest choice of IC and related technologies, an unmatched knowledge base and a nearly 50-year track record of innovation, there's a Thermo Scientific™ Dionex™ IC solution to meet all your analytical and throughput requirements.

Thermo Scientific™ Dionex™ Integrion™ HPIC™ system

High performance system in a compact package for a broader range of ion analyses.



Thermo Scientific™ Dionex™ ICS-6000 HPIC™ system

Truly modular, top-of-the-line IC platform that can be configured to tackle an unmatched variety of applications.



The Dionex Inuvion IC system

The Dionex Inuvion IC system is a reliable and robust platform for everyday ion analyses that can be readily adapted as workflow requirements change.

Reliable, cost-effective productivity

Performance you can count on

Advanced high-performance pump technology and electronics allow use of a wide range of columns and chemistries to improve speed and quality of results.

Refined simplicity

Smart, function-driven design for safe and quick access to everything on the instrument and built-in how-to videos that reduce training time and simplify setup and operation.

Match suppression type to your application

Choose either electrolytic or chemical continuously regenerated suppression.

Fast, flexible convenience

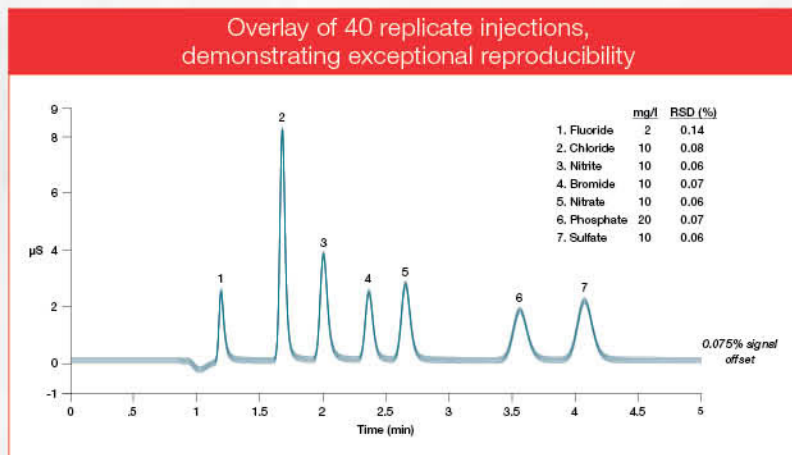
Reagent-free IC (RFIC™) capability makes eluent preparation as simple as “just add water,” while ensuring more consistent results and enabling optimized gradient separations.

Get results faster

High-pressure capability is standard across all of our IC systems, which lets you use 4 µm columns to optimize chromatographic efficiency with shorter sample run times and/or improved resolution.

Be ready for new analytical challenges

Easily configurable with customer-installable accessories and economically upgradeable to full-featured capabilities as budget allows.



“As the lab manager of an environmental testing laboratory, I need a system I can count on to efficiently deliver consistent results without taking up a lot of space in the lab. My customers’ requests and regulations keep changing so my IC system should meet current requirements while letting me update it when my budget allows.”



Dionex Integrion HPIC system

For any lab requiring versatile and efficient IC analyses, the Dionex Integrion HPIC system offers superior performance and reliability. With flexible detector configurations, high pressure capabilities, and automated eluent generation, it delivers the results and productivity you need.

High performance, low operating costs

Easy to use

Intuitive, flow-path-based plumbing with simplified fittings.

Get results faster

High-pressure capability lets you use 4 μm columns to optimize chromatographic efficiency with shorter sample run times and/or improved resolution.

Attain additional sensitivity

Enhanced thermal control and stability produces steadier baselines for analyses requiring lower detection levels.

Stay up and running

Convenient troubleshooting videos accessible from Thermo Scientific[™] Chromeleon[™] Chromatography Data System (CDS) software.

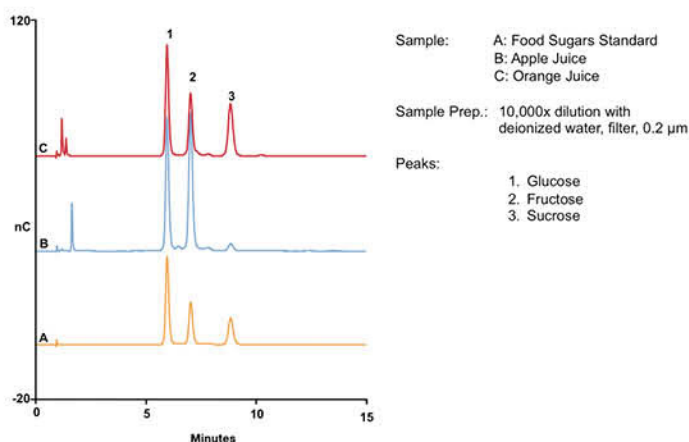
Achieve reliable, reproducible results

Automated eluent generation (EG) helps to ensure precise, accurate results.

Expand the analyte range

Switch between conductivity (CD) and electrochemical (ED) detectors or connect to an external one.

Simple sugar analysis in fruit juices

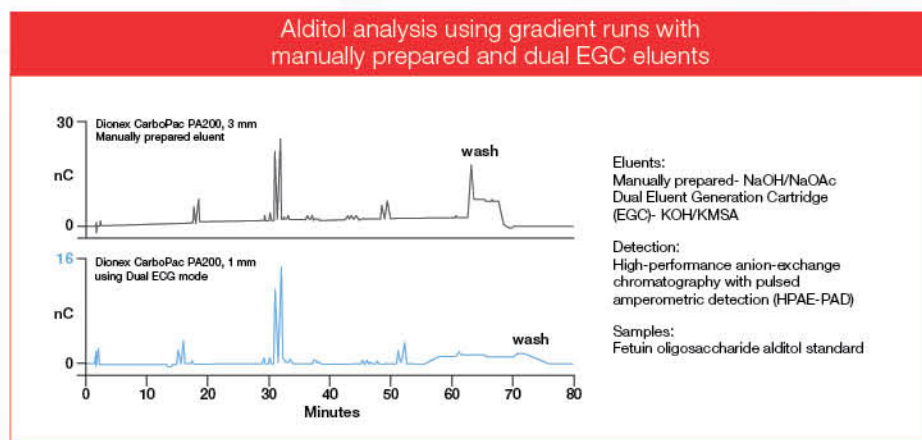


“For my company, quality assurance is critical, and as a member of our food testing lab, I appreciate that our IC system can handle 90% of our day to day needs with ease, but also has the additional temperature control, gradients, and detection capabilities needed for more challenging analyses.”



Dionex ICS-6000 HPIC system

The Dionex ICS-6000 HPIC system is a truly modular, top-of-the-line, high-performance system, designed to adapt to the needs of users and push the boundaries of ion analysis. It enables you to develop and run different methods for a single sample, or for different samples simultaneously.



Accelerated HPIC productivity

Accelerate your productivity

Easily convert to dual-channel configuration in order to perform simultaneous analyses of one or even two different samples.

Solve complex analysis challenges

Address a full range of IC applications that include: trace concentrations of analytes using 2D IC or automated post-column reactions for enhanced sensitivity; complex carbohydrate analysis using dual eluent generation (Dual EGC) or proportioned gradients with amperometric detection.

Be ready for any new analyses

Use the detector of your choice—suppressed and non-suppressed conductivity, electrochemical, UV-vis absorbance, or mass spectrometry.

Get results faster

Shorten run times and increase throughput by taking advantage of the enhanced resolution of 4 μm -particle size columns to optimize chromatographic efficiency.

Choose a configuration to match your application needs

Modular design lets you select a system with single or dual configurations which can be upgraded at any time; a variety of formats are available:

- Standard bore (3–7 mm ID)
- Microbore (1–3 mm ID)

“I never know what kind of samples I’m going to get in my contract testing lab and I need a system that can handle everything from trace level water contaminants to routine ions. The flexibility and sensitivity of my IC system allows me to adapt to whatever analytical challenge arises.”



Start your IC analysis off on the right foot

Samples may come in every form—solid, liquid or gas—and the quality of your sample preparation sets the tone for the rest of your laboratory operations. The right sample preparation techniques are the first step to ensuring reliable and accurate results. Our automated solutions seamlessly fit into your lab's workflow and eliminate time-consuming manual methods.

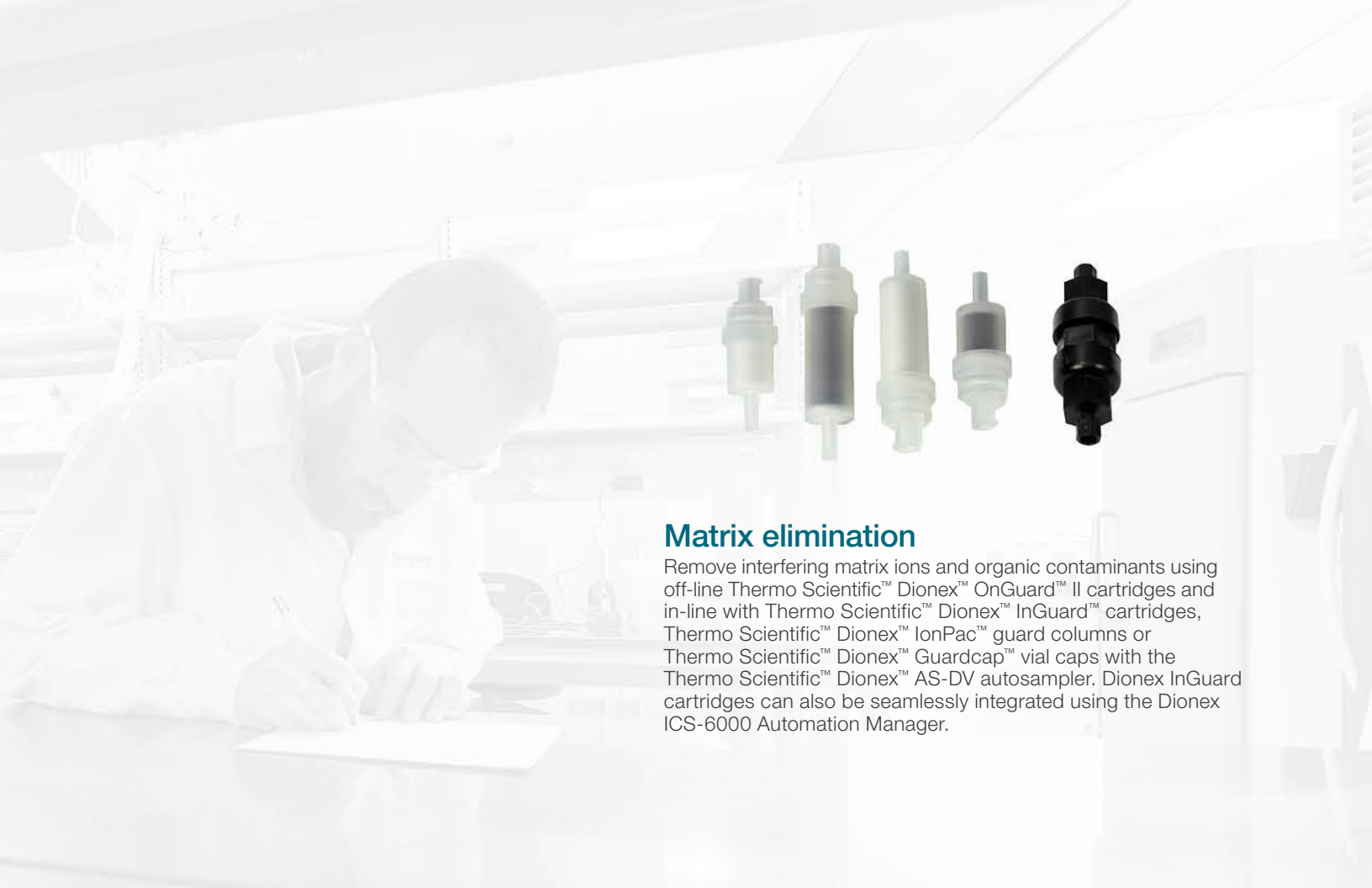
Air monitoring

URG Air Samplers can easily collect, prepare and quantify ionic pollutants on a continuous basis by separating and collecting volatiles and particulate matter.

Automated dilution

Eliminate tedious manual steps and improve results consistency. The Thermo Scientific™ Chromeleon™ AutoDilution feature can be used to adjust samples that fall out of calibration range.





Matrix elimination

Remove interfering matrix ions and organic contaminants using off-line Thermo Scientific™ Dionex™ OnGuard™ II cartridges and in-line with Thermo Scientific™ Dionex™ InGuard™ cartridges, Thermo Scientific™ Dionex™ IonPac™ guard columns or Thermo Scientific™ Dionex™ Guardcap™ vial caps with the Thermo Scientific™ Dionex™ AS-DV autosampler. Dionex InGuard cartridges can also be seamlessly integrated using the Dionex ICS-6000 Automation Manager.

Combustion IC

Save time and improve results by automating halogen and sulfur content analysis in difficult-to-process samples such as ores, coal, printed circuit boards, solders, plastics and petroleum products, in addition to surface, ground, and wastewaters.



Make the most of your resources

The more work you can get out of your laboratory instruments, the more productive your team can be. We've got a full portfolio of autosampler technologies to automate just about any IC operation—from simple injections to complex sample preparation.

You can select the right level of automation for your IC application. Our autosampler technologies range from high-precision, low-cost time-savers to high-speed, high-volume technologies that can double throughput using simultaneous injection techniques.

Thermo Scientific™ Dionex™ AS-HV autosampler

Simplify your low-level analyses with state-of-the-art design, customizable fluidics and trace-compatible materials.





Thermo Scientific™ Dionex™ AS-DV autosampler

A cost-effective solution for the water analysis laboratory, this affordable instrument delivers high-end performance. Combine Dionex Guardcap vial caps or inline filter caps with Thermo Scientific™ Dionex™ AS-DV Autosampler PolyVials to seamlessly integrate automated inline sample preparation.

Thermo Scientific™ Dionex™ AS-AP autosampler

Elevate your workflow—and your throughput—with a full suite of automation capabilities that are flexible, customizable and easy to use. Maintain sample integrity with optional temperature control and select sample trays holding 0.3 mL or 10 mL vials or 96-well plates.





All the right chemistries

It all starts with chemistry, and no one gives you a greater depth and breadth of IC choices. From a complete selection of industry-standard columns specified in official methods (US EPA, ASTM, ISO, etc.) to unique, proprietary high performance columns and chemistries—whatever your application, we can help you optimize it.

Our polymeric columns address a variety of separation modes, including ion exchange, ion exclusion, reversed-phase ion pairing and ion suppression. And our unique Virtual Column Separation Simulator lets you predict chromatography under a wide range of experimental conditions to immediately see the effects of varying eluent compositions and temperatures. It's like having an IC guru right in your own lab.

Optimize your analyses

Quality you can count on to get results

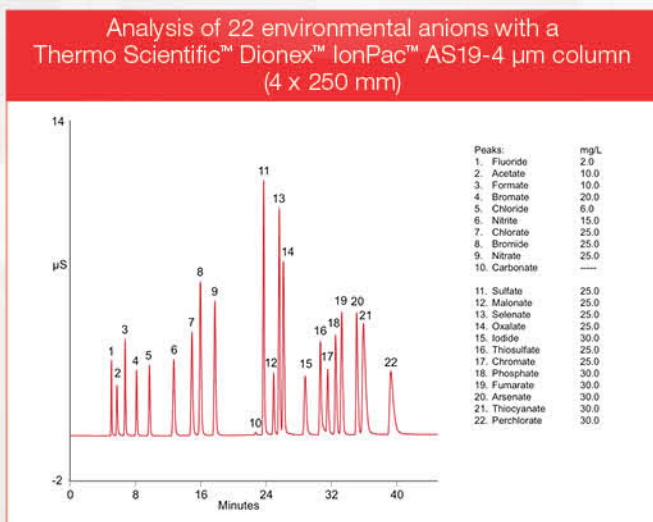
We develop, manufacture, test and perform quality control on all of our IC columns.

The right chemistry for your sample

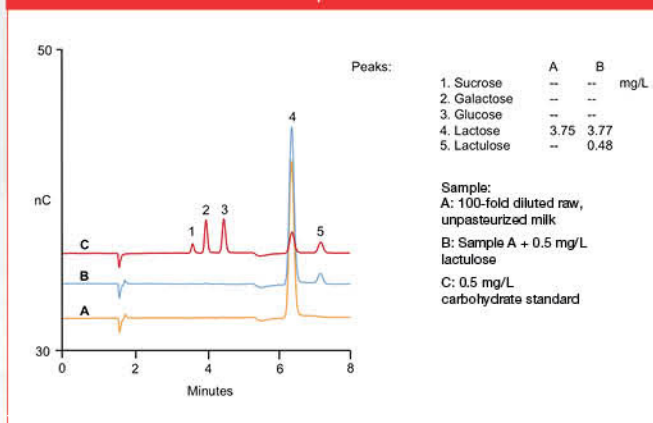
The unmatched breadth of our column portfolio ensures you'll find the right one for your needs.

Optimize for speed or resolution

High efficiency 4 μm particle columns let you shorten run times or better resolve closely eluting peaks.



Analysis of lactose and lactulose in raw unpasteurized milk in <8 min with a Thermo Scientific™ Dionex™ CarboPac™ SA10-4 μm column

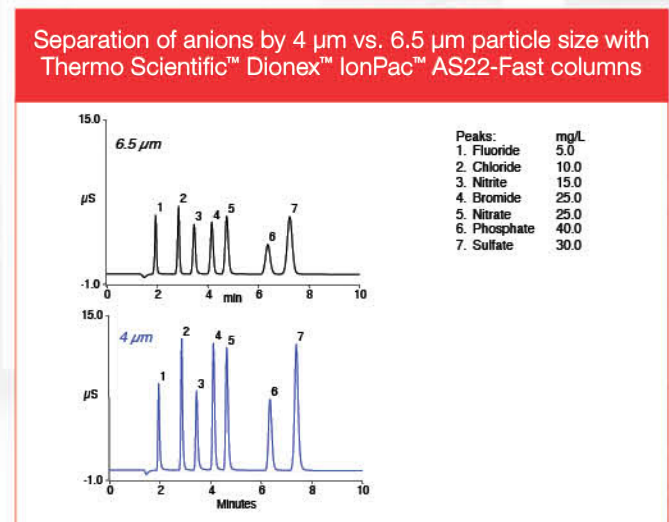


Ultimate application flexibility

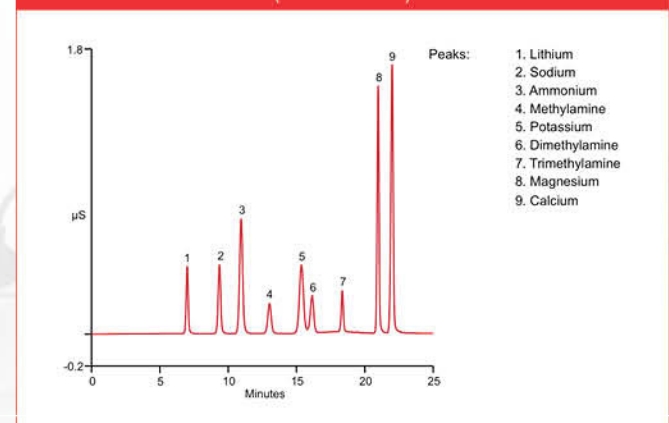
Choose from standard bore or microbore formats.

Accelerate method development

The Virtual Column Separation Simulator models IC separations for real-world samples using known retention data and IC-specific retention algorithms—allowing you to confidently choose the right column and operating conditions for your application.



Separation of six common cations and methylamines with a Thermo Scientific™ Dionex™ IonPac™ CS19 column (2 x 250 mm)



Thermo Scientific™ Dionex™ IC PEEK Viper™ fittings



Dionex IC PEEK Viper fittings provide worry-free, finger-tight connections with virtually zero dead volume and are available in convenient kits tailored specifically to your IC system.

Enhanced detection for bigger challenges

Complex sample analysis requires both sensitive detection and removal of any matrix interferences. In addition to those challenges, distinguishing between chemical forms of an element can be especially critical in food, environmental and pharmaceutical applications, because different forms of an element can exhibit different physicochemical properties, including varying toxicities.

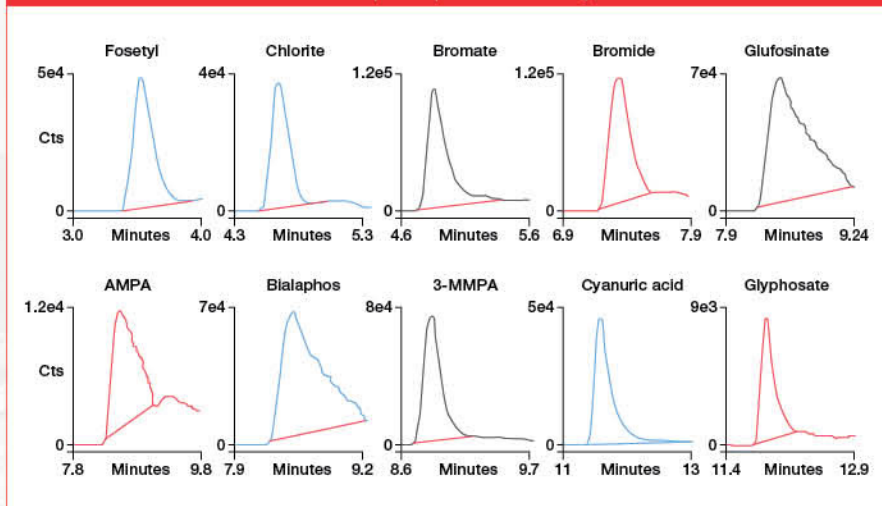
To meet these challenges, we provide single-vendor solutions that combine the unique properties of ion chromatography with technologies such as Mass Spectrometry (MS) or Inductively Coupled Plasma Mass Spectrometry (ICP-MS).

Ion Chromatography – Inductively Coupled Plasma Mass Spectrometry (IC-ICP-MS)

IC-ICP-MS combines the sensitive elemental detection of inductively coupled plasma MS with the metal-free fluidic flow path of IC, enabling speciation analysis of trace elements.



Selected ion monitoring traces of anionic standards used in polar pesticide analysis.



Ion Chromatography – Mass Spectrometry (IC-MS)

IC-MS maximizes the ability to detect and quantify unexpected co-elutions of components and to confirm trace components. It combines the sensitivity and selectivity of IC with the specificity and sensitivity of MS and is optimized for low mass ions using a single software platform. IC systems can be paired with single or triple quadrupole MS or even an High Resolution Accurate Mass (HRAM) spectrometer for the ultimate in sensitivity.







Spend more time on science, not software

A chromatography data system, or CDS, is an essential tool for the modern chromatography lab. It needs to manage all the analytical processes—from instrument control to raw data storage and processing to results and reporting.

Our mission is to give you a CDS that delivers a superior user experience and fits in with your existing chromatography workflows to help you achieve better results, faster. Whether your workflow needs are basic or complex, from fully compliant routine analyses to totally flexible research workflows or anything in between, our industry-proven Chromeleon CDS software can be configured to handle them all.

One CDS helps you do it all

Increase lab efficiency

No need to learn multiple software packages; perform both IC-MS and IC analyses with the Chromeleon CDS software, the first CDS software to control MS instruments.

Easily set up methods

Access the Thermo Scientific™ AppsLab library of analytical applications and download Thermo Scientific™ eWorkflows™ for error-free methods implementation.

Enjoy more “right-first-time” analyses

Automate System Suitability checks and take advantage of Intelligent Run Control to automate in-run actions to pass/fail decisions, including support for automatic dilution.

Take advantage of increased reliability

Benefit from Smart Startup, Standby and Shutdown by enabling unattended system startup with automatic initialization and equilibration and ensuring safe shutdown.

Simplify administration

Centralize administration of licenses, users and network resources; organize and archive data; and distribute resources across your network or between laboratories.

Facilitate regulatory compliance

Make compliance less of a chore with automated software and instrument qualification routines, qualification monitoring, and comprehensive security tools.

Keep your uptime at an all-time high. We've got your back.

Thermo Fisher Scientific offers one of the broadest and most comprehensive sets of service solutions in the industry. From installation and training your team on instruments, to maintaining and repairing your fleet on your schedule, we've got your back.

Our trusted service network helps ensure your instruments remain reliable and at peak performance. Benefit from OEM technical expertise, with direct access to more than 2,000 highly experienced factory-certified engineers.

Elevate the efficiency of your laboratory with a faster path to resolution—customers with a service plan realize a 2x faster response time than those without a service plan. Proactive preventive maintenance visits help increase instrument uptime. Our team is dedicated to delivering seamless service commitments and improving overall service experiences.

Choose Thermo Fisher Scientific when you cannot compromise.



Dionex ion chromatography system comparison



Feature	Inuvion Core	Inuvion	Integrion	ICS-6000
High-pressure operation (up to 5,000 psi)	✓	✓	✓	✓
Chemical suppression	✓	✓	✓	✓
Electrolytically regenerated suppressor		✓	✓	✓
Automated sample preparation	○	○	○	○
Eluent generation		○	✓	✓
Gradient separations		○	✓	✓
Integrated electrochemical cell			○	○
Modularity				✓
Configurable as independent dual system				✓
Proportioned mechanical gradients				○
2-D Chromatography				○
Dual eluent generation				○

✓ Standard ○ Optional



Our promise to you

From routine analysis to breakthrough discoveries, our innovations are helping professionals do the science they need to do, the way they want to do it.

With the industry's most complete—and most trusted—line of analytical instruments, laboratory equipment, software, services, consumables and reagents, we give our customers the tools they need to solve complex analytical challenges and increase laboratory productivity.



3-Year instrument warranty

Cost of parts, labor and travel for the first year;
cost of parts for the second and third years

Suppressor warranties

Thermo Scientific™ Dionex™ DRS 600 dynamically regenerated suppressor	6 months
Thermo Scientific™ Dionex™ ERS 500e electrolytically regenerated suppressor	
Thermo Scientific™ Dionex™ ERS 500 carbonate electrolytically regenerated suppressor	
Thermo Scientific™ Dionex™ CES 300 capillary electrolytically regenerated suppressor	12 months
Thermo Scientific™ Dionex™ CRS 500 chemically regenerated suppressor	24 months
Thermo Scientific™ Dionex™ CRS ICE chemically regenerated suppressor	

Learn more at thermofisher.com/IC

General Laboratory Equipment – Not For Diagnostic Procedures

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