Agilent

Trusted Answers

Beyond all borders

Agilent 7010D Triple Quadrupole GC/MS





Launch of the Agilent 7010D Triple Quadrupol GC/MS

While you have grown over the past ten years and adapted to market changes, Agilent has been a reliable partner for you. Now we have listened to your needs again.

Meet the Agilent 7010D GC/TQ. With a new benchmark for robustness and evidence in the ultra-track sector combined with sustainability and transparency, it overcomes all existing limits. In addition, its High Efficiency Source (HES) 2.0 provides sensitivity in the attogram range, while heated gold quadrupoles and the JetClean ion source provide unmatched performance and uptime.

When using the latest MassHunter Acquisition 13.0 software, you also benefit from a modern and intelligent user interface with high comfort and familiar operation.

HES 2.0 ion source technology maximizes uptime and provides industry-leading detection limits. This allows you to maintain your competitive advantage.

With the improved detector and pre-pump preventive maintenance reporting system, you can monitor often needed consumables to maximize their service life.

Thanks to mobile access features, you no longer have to be in your lab to ensure smooth operations.

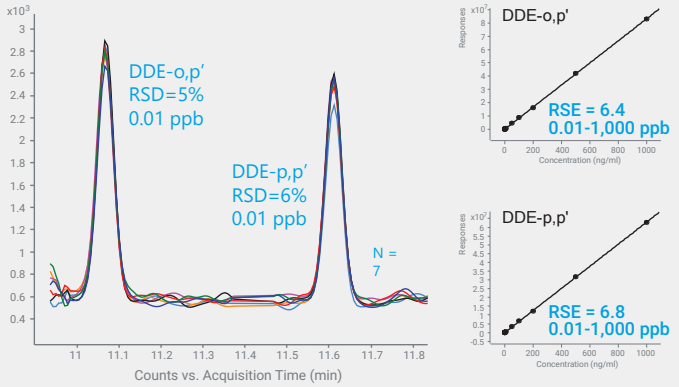
Significant improvements to the Retention Time Locking interface optimize functionality and provide a seamless, user-friendly method.

Agilent J&W 5Q GC columns combine industry-leading ultra-inert performance with ultra-low column bleeding and ultra-fast conditioning.

Developed for you

Detection limits in the attogram range

The high sensitivity and excellent selectivity of the 7010D GC/TQ enables you to meet ultra-track detection requirements while reducing the need for cost-intensive sample preparation.





Maximum operating time

The HES 2.0 offers more than just sensitivity – it ensures robustness. By improving carrier gas deflection efficiency, the HES 2.0 and heated hyperbolic gold quadrupoles minimize unplanned downtime and maximize long-term performance. The result is maximum operating time and a fast return on investment.

Integrated intelligence

Functions such as SWARM Autotune and the Preventive Maintenance Reporting System improve device performance and diagnostic capabilities. In addition, MassHunter optimization software for GC/TQ streamlines MRM optimization and method transfer, while retention time locking ensures consistent retention times across analyses. These innovations not only increase performance, but also contribute to an improved user experience.



"The intelligence of our GC/TQ systems from Agilent has an important role"

Played in increasing our productivity and improving data quality – especially SWARM Autotune! It's really tremendously fast!

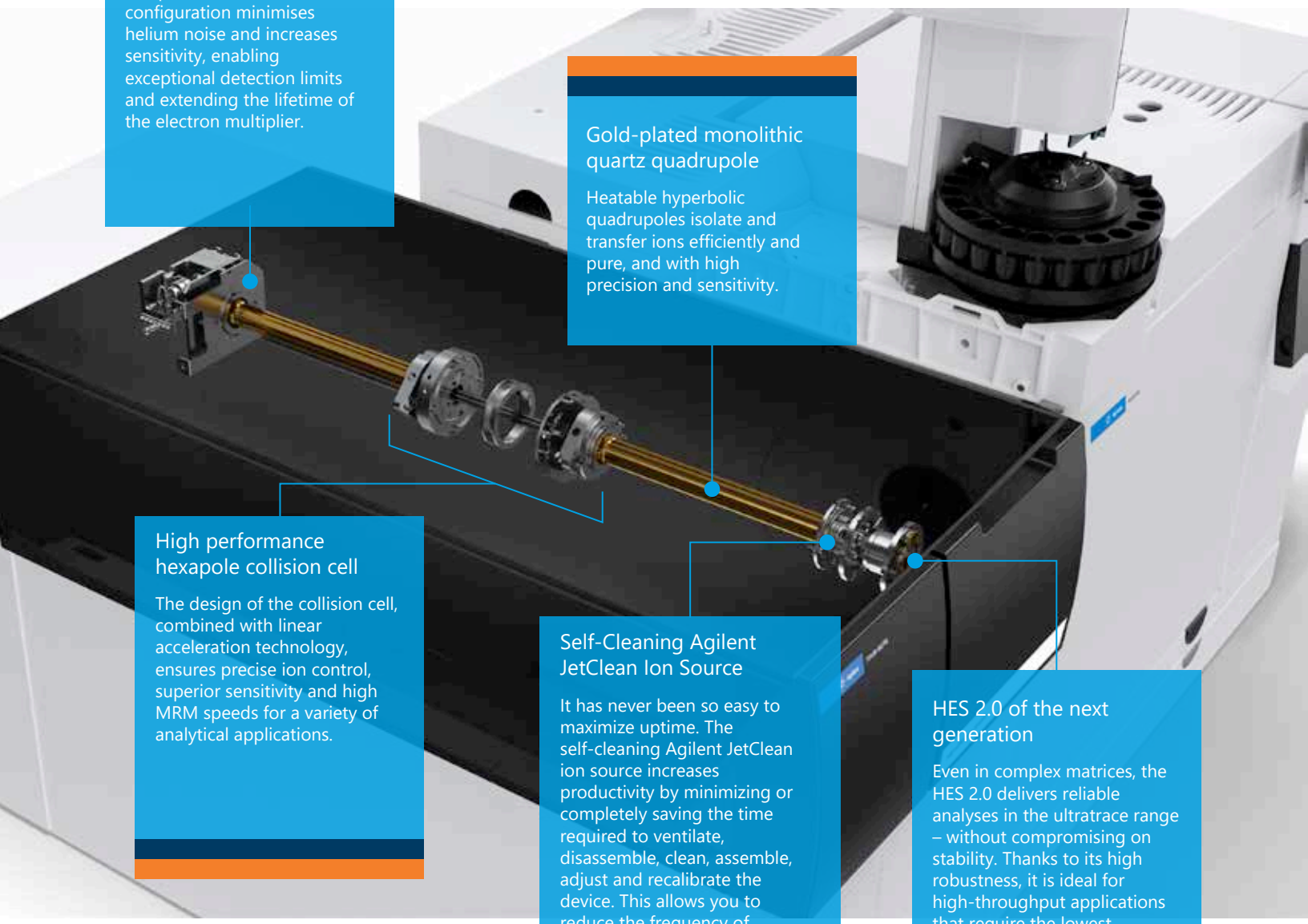
– Dr. Andreas Kapaklis

Department Team Leader
TESTEX AG

Technology that expands boundaries

Create quantitative results with the highest data reliability

The development of a GC/TQ system with the highest confidence worldwide is a continuous process. With each step, we increase speed, improve functionality and create new analytical opportunities without losing sight of the essentials: your business result.



Advanced detector technology

A triple-off-axis detector configuration minimises helium noise and increases sensitivity, enabling exceptional detection limits and extending the lifetime of the electron multiplier.

Gold-plated monolithic quartz quadrupole

Heatable hyperbolic quadrupoles isolate and transfer ions efficiently and pure, and with high precision and sensitivity.

High performance hexapole collision cell

The design of the collision cell, combined with linear acceleration technology, ensures precise ion control, superior sensitivity and high MRM speeds for a variety of analytical applications.

Self-Cleaning Agilent JetClean Ion Source

It has never been so easy to maximize uptime. The self-cleaning Agilent JetClean ion source increases productivity by minimizing or completely saving the time required to ventilate, disassemble, clean, assemble, adjust and recalibrate the device. This allows you to reduce the frequency of manual cleanings by 80% or more depending on your application.

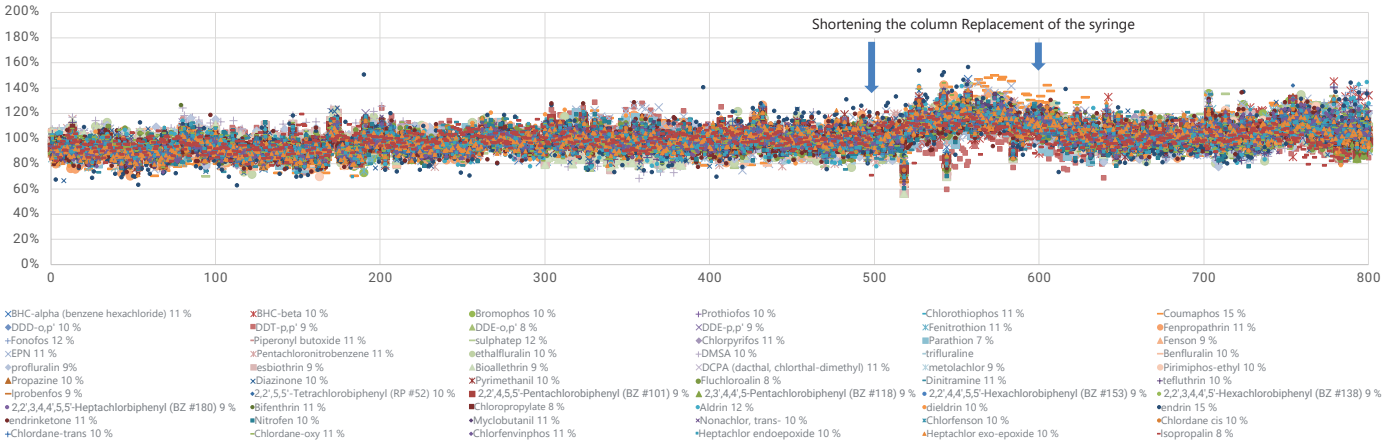
HES 2.0 of the next generation

Even in complex matrices, the HES 2.0 delivers reliable analyses in the ultratrace range – without compromising on stability. Thanks to its high robustness, it is ideal for high-throughput applications that require the lowest detection limits.

Unmatched high performance and long operating time

The 7010D GC/TQ is more than just a suitable device for your most demanding applications. The innovations within the optics path provide greater sensitivity, improved data quality and the most robust GC/TQ of the 7010 series to date.

Reproducibility at 2 ppb in black tea, recorded for 60 pesticides with over 800 injections



Sensitivity without compromise: analysis of pesticides in black tea

The 7010D GC/TQ system with the HES 2.0 ion source consistently provides high sensitivity for complex analyses, including the detection of pesticides in a black tea matrix. With remarkable stability in the ultratrace range (2 ppb), the 7010D shows very low relative standard deviations (RSDs), even in challenging pesticide targets.

The system demonstrated increased efficiency over 800 injections, resulting in the implementation of the backflush in the middle of the column arrangement and the temperature-controlled MMI inlet.
The maintenance effort was minimal, it was only a single column trim is required. In addition, the septum and liner every 100 injections during the routine maintenance of the injector syringe. In particular, the HES 2.0 ion source preserved a Consistent performance without cleaning interventions were required. The robustness of the system and The method was followed by the maintenance of Measuring accuracy with good precision (RSDs < 20 % for 176 compounds for an extract of black tea, which is mixed with 2 ppb and over 800 runs in a period of 17 days of continuous Analysis was analyzed sequentially.



More than 100 million injections

Since 2014, analysts worldwide have performed more than 100 million injections using Agilent 7010 series GC/TQ devices. During this period, regulations and limits of detection have changed steadily.

The future-proof 7010D GC/TQ has undergone design improvements based on the needs and experience of laboratories worldwide. As a market leader, Agilent anticipates future challenges and is thus always one step ahead of important changes. With its continued commitment to innovation, Agilent continues to set new industry standards and ensure that the 7010D GC/TQ remains a pioneer in analytical excellence.



Agilent 7010D GC/TQ



Agilent 7010A GC/TQ



Agilent 7010B GC/TQ



Agilent 7010C GC/TQ

"In our laboratory"

the sensitivity and operational readiness of devices essential to deliver results to our customers. Our 7010 GC/TQ systems not only meet these requirements, but exceed them, delivering exceptional data each time.

– Dr. Agustin Pierri

Technical Director
Weck Laboratories, Inc.

"After more than 5,000 injections" shows

The 7010D GC/TQ system remains exceptionally sensitive and maintains its stable performance in the analysis of complex matrices such as spices and dried herbs.

by Mari Carmen Saura

Technical Director, Laboratorio Químico Microbiológico

'Over a period of 8 months'

We performed around 3,600 measurements of QuEChERS extracts...HES 2.0 has shown excellent performance and robustness in terms of intensity and signal resolution over the entire time period.

– Athanasios Nitsopoulos

CEO Labor Friedle GmbH



MassHunter Acquisition 13.0: Modern, intelligent and familiar

MassHunter Acquisition 13.0 for all GC/MS applications – including Single Quadrupol, Triple Quadrupol and Quadrupol Time-of-Flight.

– A new, optimized retention time locking interface ensures greater user-friendliness.

– Simple sample preparation technology simplifies the automation of extraction,
Adding, heating and mixing to perform derivatizations, adding internal standards, serial dilutions and similar tasks.

With MassHunter software, users of any level of knowledge can equally
arrive at reliable results. It supports numerous applications with user-friendly method templates.



Make your data management smarter, easier and safer

Traditional data management systems are error-prone and labor-intensive, as each device's data must be managed individually and manually. With Agilent, you can accelerate your transition to a connected model and benefit from the following advantages for your laboratory:

Connectivity: Device integration makes it easy

Collect, organize and secure data.

– Efficiency: Work with experts and

Get the right information quickly for questions, and save time and money updating devices and software.

– Security: Use and set strategies for the

Improve data integrity while minimizing the risk of data leaks and losses.

– Compliance: Ensure data security,

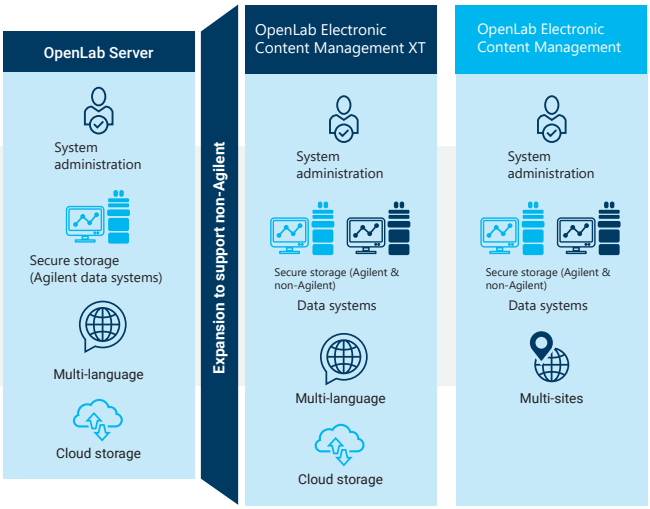
Control access and comply with national and European guidelines on electronic records.

Agilent's approach to data management provides a single point of access to data generated by devices, data systems and laboratory software. In addition, this integration takes place completely in the background. Your laboratory staff does not need to change the way they work and interact with the software.

With data access from a single source, analysts can work together without compromising data integrity and create consistent processes for workflows such as implementing methodologies. Data quality, information sharing and efficiency can also improve tremendously.

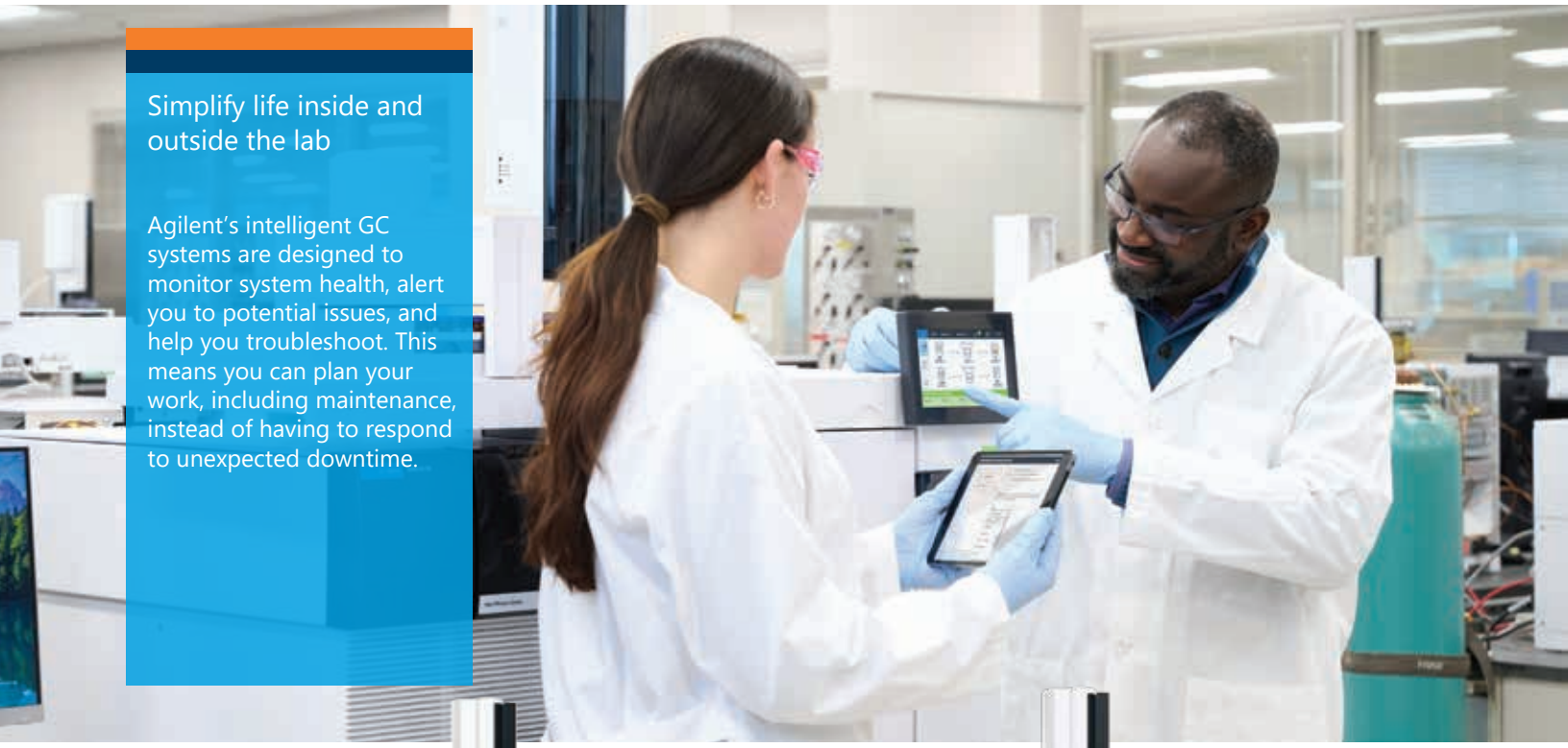
Flexible solutions for the entire data management

Overcome the limitations of ad hoc data management with a set of built-in, centralized options that can support device data in all formats.



We are committed to optimizing your GC/TQ analysis

For over 50 years, Agilent has led the way with industry-changing GC and GC/MS devices, consumables, services, software and other innovations. By working in partnership, we can streamline the workflows of your laboratory and help you to approach your analytical and organizational goals with big steps.



Simplify life inside and outside the lab

Agilent's intelligent GC systems are designed to monitor system health, alert you to potential issues, and help you troubleshoot. This means you can plan your work, including maintenance, instead of having to respond to unexpected downtime.



Agilent 8890 GC system

Meet your current and future analysis needs. The 8890 GC delivers fast, accurate results with flexible configuration options for specific analysis requirements. When it comes to precise results and operational readiness of the device, this intelligent and powerful gas chromatograph consistently exceeds expectations.



Agilent Intuvo 9000 GC system

Eliminate barriers to GC productivity. The Intuvo 9000 system is designed for rapid analysis and high throughput while simplifying your workflows in the laboratory. With click-and-run connections, you can change columns in less than a minute, while ballistic direct column heating provides faster GC cycle times and improved reproducibility.

With Agilent's pillars and consumables, you get more than just products

You also benefit from Agilent's rigorous quality control specifications and consistently high quality, which improves the sensitivity and performance of your device.

Agilent is your source of consumables from a single source, with which you can put together complete solutions for any application. In addition, comprehensive workflow guides will provide you with the experience and know-how of the Agilent team.





Agilent J&W 5Q GC pillars

Get to know the new gold standard for GC/MS. Agilent J&W 5Q GC columns combine industry-leading ultra-inert performance with ultra-low column bleeding. They ensure optimal delivery of analytes to your quadrupoles, allowing you to push the limits of your research.



Self-locking pillar nut and ferrule

This unique self-locking stainless steel nut for GC pillars ensures a finger-proof connection without expensive upgrades, adapters or tools. Their innovative design always maintains a leak-free seal, even after hundreds of injections.



Gold-plated ferrules

Agilent's gold-plated ferrules ensure complete inertness and are ideal for capillary flow technologies such as the backflush. Thanks to their unique mechanical design, leakage-free connections that do not require retraction can be produced with ease.



Accessories for the inert flow path

Create an inert flow path from the injector to the detector. Ultra inert columns and liners ensure an optimal signal-to-noise ratio and ensure the lowest column bleeding, highest inertness and best column-to-column reproducibility.



Gas Clean Filter Kit

Less column damage and less loss of sensitivity. Gas Clean filters provide a contaminant-free gas line and intelligent sensors provide a warning message when filters are saturated and need to be replaced.



Soundproofing device

A quiet work environment is hard to achieve when your noisy pre-pump is in operation. But with the high-quality soundproofing hood Agilent Quiet Cover you can work undisturbed next to your pump, with reliable noise protection, lower overheating risk for the pump and easier pump maintenance.



Partner for sustainability and business success

The perspective of sustainability transforms the way researchers, scientists and manufacturers view products, processes and supply chains. However, it can be challenging to reduce a laboratory's environmental impact while optimising workflows and costs.

At Agilent, we believe that efficiency, productivity and sustainability are intertwined.

The pursuit of sustainability is an integral part of our business and how we respond to the challenges of our customers. Together, we can ensure that your laboratory meets its sustainability goals while improving performance, losing no accuracy and remaining competitive.

my green lab.

Collaboration with My Green Lab

Agilent is working with My Green Lab to have the devices independently audited for ACT (Accountability, Consistency and Transparency) certification. ACT certifications provide information about the environmental impact of manufacturing, using and disposing of a product and its packaging, enabling buyers to make informed, sustainable decisions. The Agilent 7010D and the Agilent 7000E, 5977C, 8860, 8890 and Intuvo 9000 GC systems have been extensively tested and are ACT certified.

More information about My Green Lab

Agilent's commitment to net zero

Since its founding, Agilent has strived to reduce energy and water consumption, waste and CO2 emissions. Now we go one step further. We are proud to announce that we will reach the net-zero target for greenhouse gas emissions by 2050. Our sophisticated approach to zero emissions includes the Paris Agreement climate targets, clearly defined interim targets and commitment to the Science Based Targets Initiative (SBTi).

Read more

We support your success

Agilent CrossLab
From Insight to Outcome

Agilent CrossLab is a service offering from Agilent that integrates services and consumables to support the success of workflows, improve productivity and increase operational efficiency. With each interaction, we strive to provide insights that help you achieve your goals faster and better. Our wide range of products and services helps you achieve the best possible performance with your devices and your laboratory – from method optimization and training to the relocation of entire laboratories to the analysis of operational data.

More information about Agilent CrossLab at www.agilent.com/crosslab

> 2 200
Agilent certified service professionals worldwide

400+
Certified training courses offered annually

Up to 90 %
all Agilent certified service professionals have higher education qualifications

7,5 years
Average experience with equipment repairs

80 %
Problems are solved within one day



50+
Technology platforms covered

2,5 days
Average time until arrival on site

Millions
Parts are available in our global logistics centers

96 %
Parts are always available immediately

50 %
of all problems are solved remotely by virtual technical support

10-year value proposition

The Agilent value proposition reflects the highest confidence in our industry-wide unrivaled standards in the development and manufacture of high-quality systems.

From the date of purchase of the desired chromatography, spectrometry or spectroscopy device from Agilent, we guarantee a service life of at least 10 years. When acquiring a newer replacement system, you will be credited with the residual value. We stand behind our systems and with our guarantee we maximize your return on investment by securing your purchase.

More info:
www.agilent.com/gcms/7010d-triple-quadrupole-gc-ms

Selection aid for GC pillars:
selectgc.chem.agilent.com

Inert river route:
www.agilent.com/en/promotions/inertflowpath

Online store:
www.agilent.com/chem/store

Here you will find an Agilent Customer Information Center in your country:
www.agilent.com/chem/contactus

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