

ULTRA-EFFICIENT IONIZATION REDRAWS THE BOUNDARIES OF GC/MS/MS

The Measure of Confidence

Agilent 7010 Triple Quadrupole GC/MS



Take your GC/MS/MS analysis to a higher level of speed and sensitivity

The Agilent 7010 Triple Quadrupole GC/MS System allows you to quantify analytes at levels previously unachievable by *any* GC/MS.

Its new high-efficiency Electron Ionization (EI) source decreases detection limits to the attogram level, so you can detect trace and ultra-trace levels of analytes with higher confidence than ever before.

More ions let you do more work in less time

In addition to decreasing detection limits, our new EI source improves throughput for enhanced analytical speed and productivity. It also enables lower-volume injections, allowing you to scale down your sample prep and reduce GC maintenance.

WHAT DO MORE IONS MEAN FOR YOUR RESULTS?

- More ions** ▶ Lower detection limits
- More ions** ▶ Faster analyses
- More ions** ▶ Greater confidence

All while maintaining 70 eV of ionization energy for library-searchable spectra

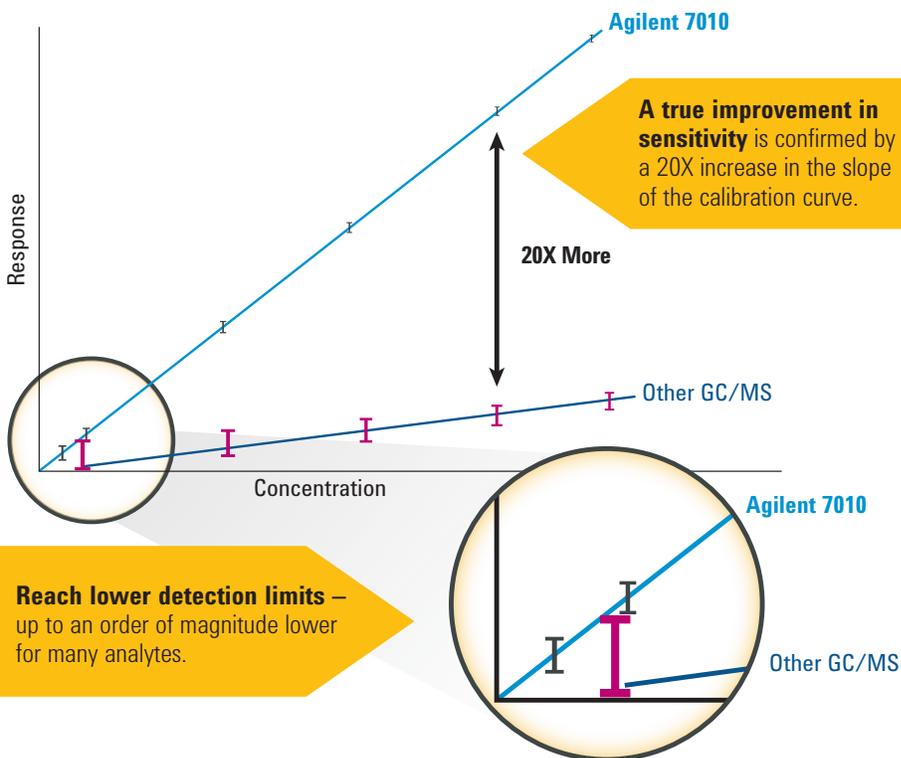


Agilent Technologies

Greater sensitivity... not just lower noise

MS sensitivity depends on the number of ions measured. The 7010 Triple Quadrupole GC/MS system's ultra-efficient EI source maximizes the number of ions that are created and transferred out of the source body and into the quadrupole analyzer – giving you the advantages of:

- Increased response and better precision at all levels
- Lower detection limits
- More precise ion ratios and better qualitative information



Simplified sample preparation and system maintenance

From smaller injection volumes to scaling-down sample preparation, the benefits of **more ions** are many.

Redefining low-volume injections



Before:
2 µL

NOW:
0.5 µL

The benefits include:

Less frequent liner replacement for longer consistent response

Longer column life, which reduces maintenance time and costs

Faster sample preparation and less need for sample preconcentration

Efficient MS/MS analysis made routine

When you create **more ions** with the 7010 Triple Quadrupole GC/MS, you can shorten analysis time or increase the number of analytes, without losing analytical performance.



You can achieve:

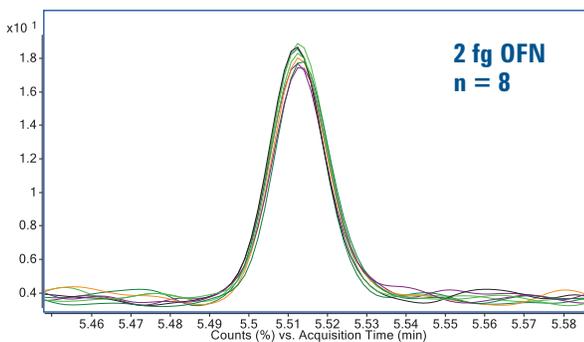
Shorter dwell times for faster analysis, so you can process more samples per hour

The ability to quantify more compounds per analysis while maintaining excellent precision and data rate

More MRM transitions per analyte facilitate confirmation and avoid matrix-dependent interferences

Improved detection limits for the most challenging methods

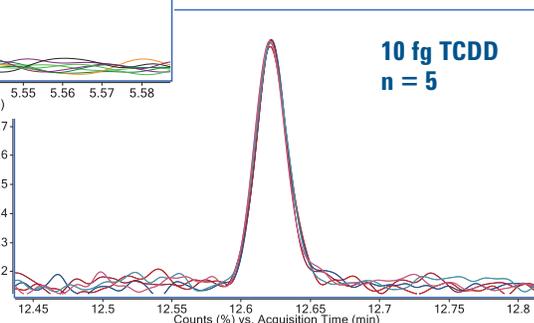
If your applications demand the *absolute lowest* detection limits, the 7010 Triple Quadrupole GC/MS ultra-efficient EI source can help you meet that requirement by delivering **more ions** per compound.



Analysis of octafluoronaphthalene (2 fg)

LOD = 300 attograms (calculated from 8 consecutive injections)

Attogram detection limits from an EI source!



Analysis of dioxin 2,3,7,8-TCDD (10 fg on-column)

Sensitivity beyond HRMS (mag sector)

Visit agilent.com/chem/7010 to learn how *more ions* can give you *more confidence* in your data



More GC/MS choices to suit your applications and budget

Agilent 7010 Triple Quadrupole GC/MS

For laboratories preparing to measure tomorrow's regulated levels *today*, the 7010 Triple Quadrupole GC/MS delivers uncompromising results. It is well suited for high-volume labs that cannot afford downtime for routine maintenance.

Agilent 7000C Triple Quadrupole GC/MS – **EASILY UPGRADABLE!**

The most precise, reliable choice for laboratories that need a cost-effective, proven solution to meet today's regulated LODs.

For more information

Learn more:

agilent.com/chem/7010

U.S. and Canada

1-800-227-9770

agilent_inquiries@agilent.com

Europe

info_agilent@agilent.com

Asia Pacific

inquiry_lsca@agilent.com

In other countries, please call your local Agilent Representative or Agilent Authorized Distributor – visit **agilent.com/chem/contactus**



Agilent 5977A GC/MSD

Agilent 5977E GC/MSD

Agilent 5975T LTM
GC/MSD

Agilent 7200 Q-TOF GC/MS

Let us help you find the right GC configuration, MS technology, and software package to meet your application and budget needs.

Visit **agilent.com/chem/7010**

This information is subject to change without notice.

©Agilent Technologies, Inc., 2014
Printed in the USA, June 10, 2014
5991-4690EN



Agilent Technologies