



The Agilent 5977B GC/MSD

# THE SOURCE OF NEW POSSIBILITIES

The Measure of Confidence



**Agilent Technologies**

# HIGH EFFICIENCY, HIGH CAPABILITY

## Agilent's new High Efficiency Source (HES) gives you 10x improvement in capabilities.

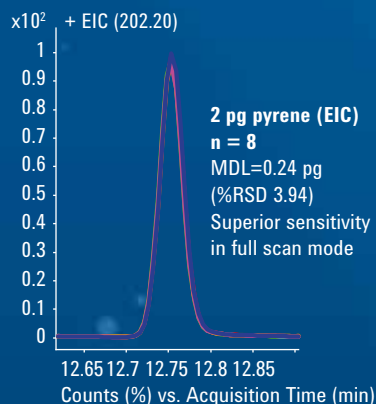
The Agilent 5977B HES GC/MSD System builds on a long tradition of providing the most trusted single-quadrupole GC/MS system. We've now pushed the technological frontier even further by introducing our newest advancement: the HES – High Efficiency Ion Source.

Fundamentally, mass spectrometry sensitivity depends on the number of ions measured. The ultra-efficient EI source of the 5977B HES GC/MSD maximizes the number of ions that are created and transferred out of the source body and into the quadrupole analyzer. This novel design revolutionizes single-quadrupole MS performance, offering two distinct advantages:

### Advantage #1

#### 10x Greater Sensitivity

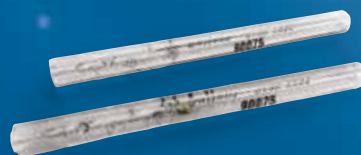
Take advantage of the improved sensitivity and see detection limits as low as 1.5 fg IDL – performance that brings yesterday's triple-quadrupole limits of detection into today's single-quadrupole laboratory.



### Advantage #2

#### 10x Less Sample Required

You'll spend less time performing sample prep and maintenance while saving on shipping costs at the same time.



#### Analyzers for guaranteed chromatographic performance

The exceptional performance of the GC/MSD systems is validated by data from common food safety, environmental, and forensics toxicology methods.



#### Go green, go dry with the IDP-3 oil free Vacuum Pump

It offers a quieter laboratory environment, no oil contamination and lower cost of ownership compared to standard oil rotary vane pump.

# OPTIMIZE WORKFLOWS IN FUNDAMENTALLY NEW WAYS

## Work smarter with integrated GC, MS, and software technologies

Agilent has completely reimagined electron ionization, allowing you to reimagine the way you think about your laboratory's operational workflow.

See analytes that have been hidden up to now. Inject a fraction of the valuable sample that you currently require. Collect, ship, store, and process a fraction of the per-sample volume that you have in the past. Handle and dispose of less hazardous solvent. The list of potential operational efficiencies is endless!



## Agilent CrossLab

From Insight to Outcome

End to end laboratory support from the Agilent service experts to keep your instruments running at peak performance with minimal downtime. We offer solutions that include repair, preventative maintenance, compliance verification, education, and a host of other services tailored to meet your needs. Ask us how we can support your laboratory today!



### Smart technology aligns GC and MS operation

The Agilent 7890B GC – with its efficient protocols and fully synchronized MS operation – is a dynamic partner for Agilent GC/MSD systems.

### Integrated software tools simplify method development

From instrument settings to data analysis and reporting, MassHunter puts you in control – and makes your GC/MSD analysis routine.

As available sample becomes smaller, increasingly active, and more complex, you simply cannot afford interferences caused by flow path activity.

**Agilent Inert Flow Path solutions** ensure a reliably inert flow path for higher sensitivity, accuracy, and reproducibility.

Learn more

**[www.agilent.com/chem/5977B](http://www.agilent.com/chem/5977B)**

GC column selection tool

**[selectgc.chem.agilent.com](http://selectgc.chem.agilent.com)**

Inert flow path

**[www.agilent.com/en-us/  
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