



Smaller, faster, easier.  
**Agilent 6850 Series II Networked GC System**

Our measure is your success.



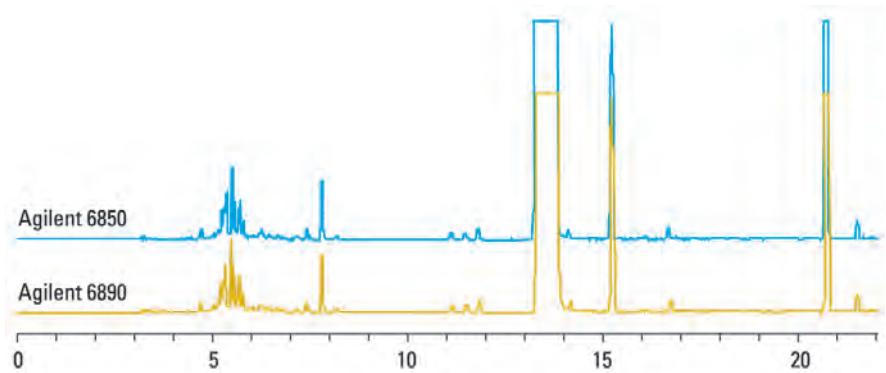
# Big Possibilities in a very small size

The advantages of Agilent technology have never been so big – or so small. Presenting the Agilent 6850 Series II, a networked GC system that brings outstanding performance and ease-of-use in a very compact size.

Consider this. Two 6850 Series II GCs side-by-side use the same footprint as one larger GC instrument – and produce virtually identical results. Successfully implemented in labs from process chemical companies and offshore oil rigs to flavor and fragrance labs and pharmaceutical giants, the Agilent 6850 has proven to be the GC when size and ease of use are critical.

## Take advantage of...

- High productivity and low cost of ownership. The 6850 is designed to help you get samples through your laboratory quickly.
- Improved laboratory efficiency thanks to sample-centric software that works the way you do.
- The performance of an Agilent 6890 GC performance-in half the footprint.
- More than double the analytical capacity and sample throughput-without doubling your laboratory space.
- Unprecedented uptime from a GC that sets a new standard for reliability and ease of maintenance.
- An absolute minimum of GC system training time and cost.
- A GC system so easy to use, every lab technician can be comfortable operating it.
- Analytical measurements that can be closer to your chemical production processes.



Weight Percent		
GC	Total Impurities	Cumene
6850	0.0664	99.934
6890	0.0650	99.935

### Virtually Identical Results

The Agilent 6850 Series II GC uses many of the same proven components as the Agilent 6890N GC. Both GCs provide state-of-the-art performance for unsurpassed retention time and quantitation repeatability. You can also use the same method parameters on either platform.

# Create more efficiency in less space

With this single-channel 6850 Series II GC, you get all the capability you need for routine GC analyses in an instrument less than half the width of an Agilent 6890/7890 GC. Installing two 6850 Series II GC's side-by-side enables you to simultaneously reconfigure or perform maintenance on one channel while the other runs samples.

For critical analyses, when you can not afford to lose any time, having two of these GCs running the same or different methods means that you are always ready to go.

And this GC is small enough, rugged enough, and simple enough to operate close to process areas. Plant operators can collect samples more frequently and get results quickly. This is an efficient and economical way to monitor your production processes more often and without interruption. You can have higher yields at the same cost. Or the same yield at lower cost.



## The most advanced pressure and flow control

Agilent's electronic pneumatics control (EPC) allows all pressures and flows to be programmed into the method. Once set, they remain constant. Agilent was the first to develop this technology. The 6850 Series II GC utilizes 6890 series EPC and enables the use of exclusive Retention Time Locking (RTL).

## Unsurpassed uptime even in rugged environments

You get all the ruggedness and reliability you expect from Agilent chemical analysis instruments. The Agilent 6850 Series II GC is the only high-performance GC to meet this strict standard.

You can choose either a rotary valve or a diaphragm valve depending upon your analytical needs. The durable diaphragm sampling valve extends valve life by a factor of 10 or more compared with rotary valves. The rotary valves used in the 6890/7890 GCs are now available when particulates or other aspects of the sample matrix are not amenable to using the diaphragm valve.



***Perfect for routine  
GC analyses in any type  
of laboratory setting***

## Simple maintenance

Agilent's unique top-opening lid provides easy routine liner maintenance for the 6850 Series II GC. Compared to other systems, replacing a liner takes a fraction of the time—which means greater efficiency from this feature alone.

## Incredible ease of use and fewer mistakes

For the ultimate in simple operation, there are just six buttons on the front panel. The operator merely selects a predefined method and starts or stops a run.

# Huge features in a little footprint

## Detectors for a wide range of applications

You have your choice of a flame ionization, thermal conductivity, flame photometric, micro-electron capture, or mass selective detector to measure a wide range of samples. These rugged detectors are the same detectors used in Agilent 6890/7890 GCs, so they offer the same performance and can be used on either GC.

## An option of split/splitless, cool-on-column, or programmable temperature vaporizing (PTV) inlets

You can use capillary columns for fast, high-resolution results or most current methods that call for packed metal columns. An option of split/splitless, purged packed, cool-on columns is also available. These are the same inlets used with Agilent 6890/7890 GCs.

## Fast GC

A small oven allows fast temperature ramps and short cool-down times without requiring a higher-voltage power source. For special applications, our even faster ramping oven is available.

Achieve faster analysis times when coupled with Agilent J&W High Efficiency GC columns without sacrificing resolution.

## Extremely simple operation

It doesn't take extensive training to operate this GC. Merely select among six buttons on the front panel to view instrument status, choose one of five methods, and start or stop the analysis.

## Easy column replacement

When you open the unique top-opening lid, the column is lifted out of the oven. This gives you safe, unobstructed access to column connections at the inlet and detector.

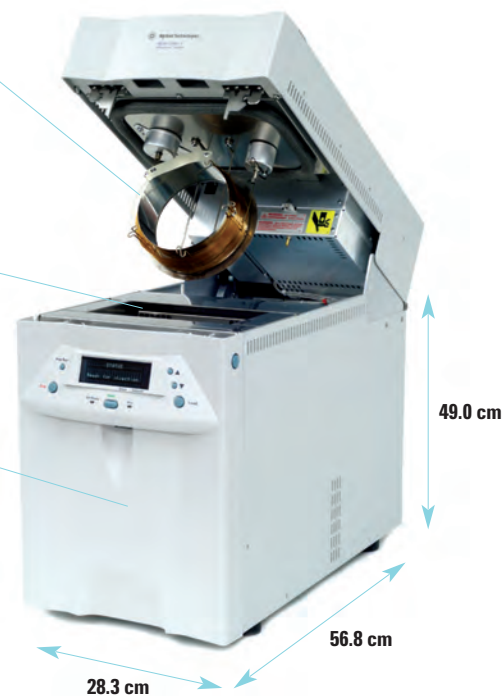
The 6850 Series II GC has a smaller oven which requires the use of columns wound on a smaller cage diameter - 5 in cage. Agilent J&W GC columns are available in this configuration by adding a suffix "E"

## Extended application range

Cryogenic cooling to  $-20^{\circ}\text{C}$  allows you to perform a broad range of applications. The small oven size consumes about half the carbon dioxide of full-sized GCs, leading to lower operational costs.

## A small footprint

Weighing less than 29 kilograms and only 28.3 cm wide, the Agilent 6850 Series II GC can fit easily on your laboratory bench or conveniently close to your production process.



# The ideal combination

## of high performance, small size, and ease of use

### Amazingly easy sample-centric software interface

The Agilent Chromatography Data Systems (CSD) for chemical QA/QC was designed for laboratories in multiple industries. Operators merely enter the sample name, and the method and GC are set automatically.

The 6850 Series II GC is network-ready with a built-in local area network (LAN) communication interface. LAN communication lets you control and monitor laboratory instruments from any networked PC. You can also access and send information on the Internet.

CDS includes Agilent's retention time locking software, you can reproduce retention times within thousandths of a minute on any Agilent 6850 or Agilent 6890 GC system (old or new).



### Flexible sample introduction choices

Agilent's 6850 Series II GC system offers a variety of automated sample introduction products to maximize system flexibility and productivity.

### Unattended operation for greater productivity

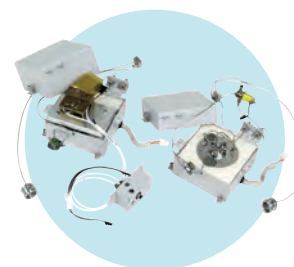
For increased productivity, the 6850 automatic liquid sampler allows unattended operation for up to 27 2-mL vials or up to 22 4-mL vials. Agilent's unique solvent saving mode enables you to get up to four times the syringe cleansing from each milliliter of solvent. Save on solvent purchase and waste disposal expenses.



6850 ALS or 7683  
Autoinjector: accurate and  
repeatable injections



G1888 (Headspace): reliable,  
inert, fully integrated system



Rotary or diaphragm valve:  
reliable valve designs for gas  
and liquid sampling

# All your supplies and support from one source

Agilent has products and experience to help you get the results you need. When you buy columns and supplies from Agilent, you're buying more than just products. Your chromatography results benefit from Agilent's stringent quality control specifications and consistent consumables quality enhancing the sensitivity and performance of your instrument. Throughout your analysis, our portfolio of sample preparation, Agilent J&W GC Columns, and supplies enhance your results.

On the web, on the phone or in person, Agilent provides the technical support and chromatography assistance to help you avoid problems and address challenges you may face in your lab.



## Ordering is easy

To get the Agilent supplies you need, simply contact your Agilent Representative, Agilent Authorized Distributor or... visit us online at [www.agilent.com/chem](http://www.agilent.com/chem)

### Popular Agilent 6850 Series II GC columns

- **Agilent HP-PLOT and GS columns** provide a comprehensive line for analysis of fixed gases, and volatile polar compounds with exceptional baseline resolution. Visit [www.agilent.com/chem/mygccolumns](http://www.agilent.com/chem/mygccolumns) for a complete resource of GC columns.
- **HP-PONA and DB-MTBE** are among Agilent's application-specific stationary phase columns, with unique characteristics to solve the most difficult separation problems of a given method.
- **DB-1ms Ultra Inert, DB-1ms, HP-1ms Ultra Inert, HP-1ms, DB-1 and HP-1** are well suited for analysis of amines, hydrocarbons, phenols and well as flavors and fragrances.
- **DB-5ms Ultra Inert, DB-5ms, HP-5ms Ultra Inert, HP-5ms, DB-5 and HP-5** are excellent general-purpose columns with a very wide range of applications including semi volatiles, drugs, FAMES, pesticides and herbicides.
- **HP-INNOWax columns** have the highest upper temperature range of bonded PEG phases.
- **HP Fast GC Residual Solvents column** is equivalent to USP Phase G43, yet has a thinner film that reduces run time 2.5 times and increases MDL by a factor of two.
- **Custom capillary columns** are available from Agilent. Please contact your Agilent sales office or Agilent Authorized Distributor if you can not find the column for which you are looking.



### The Agilent Service Guarantee

Get a level of confidence only available from Agilent. Should your Agilent instrument require service while covered by an Agilent service agreement, we guarantee repair or we will replace your instrument for free. No other manufacturer or service provider offers this level of commitment to keeping your laboratory running at maximum productivity.

## A Sizable Promise

For nearly two decades, Agilent Technologies has been improving the way laboratories get results, perform their processes, and enhance their businesses. And the Agilent 6850 Series II GC is no exception. With exemplary performance and outstanding ease-of-use packed into its compact frame, the 6850 will help improve the efficiency and productivity of your lab.

### The Agilent Value Promise-10 years of guaranteed value

In addition to continually evolving products, we offer something else unique to the industry-our 10-year value guarantee. The Agilent Value Promise guarantees you at least 10 years of instrument use from your date of purchase, or we will credit you with the residual value of that system toward an upgraded model. Not only does Agilent ensure a safe purchase now, we help ensure your investment is as valuable to you in the long run.

### Information at your fingertips

Stay up-to-date on the 6850 Series II GC and other Agilent products. Register at [www.agilent.com/chem](http://www.agilent.com/chem) to receive exclusive benefits, such as:

- Personalized email notifications that reflect your selected interests
- Access to how-to videos, chromatogram libraries, application notes, and more
- Free firmware and software updates
- Fast enrollment for e-Seminars and other training



## Find out more today

For more information about how you can benefit from the Agilent 6850 Series II GC system, Agilent's support services, or Agilent training courses, visit us online or call toll free:

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

**1-800-227-9770 (in the U.S. and Canada)**

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