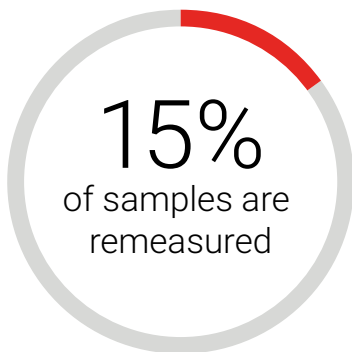




## Final Upgrade Offer

Agilent 5800 and 5900 ICP-OES spectrometers

### Top lab time wasters



An online poll found that labs are measuring 15%, on average, of samples more than once.

Analysis of instrument service data shows that the problems causing up to 30% of service calls could have been solved by lab staff. All they needed was the right information and guidance. The Agilent 5800 and 5900 were designed to solve both these problems.

### Upgrade your ICP-OES and reclaim your wasted time

If you wish to upgrade from an older Agilent or Varian ICP-OES to a new Agilent 5800 or 5900 ICP-OES, a limited time upgrade offer is available. Please contact your local Agilent office/representative to take advantage of the offer.



### Why upgrade to an Agilent 5800 or 5900 instrument?

The Agilent 5800 and 5900 instruments use smart algorithms and diagnostics to automate troubleshooting, preempt maintenance, and identify problems that could impact your results.

The instruments are also designed to overcome many of the problems or annoyances associated with older ICP-OES instruments.

Common problems with older ICP-OES instruments	What an Agilent 5800 or 5900 offer
Blocked or leaking nebulizers cause measurement failures, forcing sample remeasurement or an unnecessary service call	The instruments can detect nebulizer problems and provide step-by-step instructions to fix the problem
Plasma fails to light	The instruments sense a plasma failure and provide step-by-step instructions to fix the problem
Horizontal torch requires constant cleaning and frequent replacement. Running the torch without solution flowing can lead to premature torch failure	Vertical torch that handles high matrix samples with less cleaning and less replacement. A vertical torch can be operated without solution flowing
Multipiece torch that is complicated to align during reinstallation	Plug-and-play torch that is automatically aligned on installation. The gas connections are also automatic, so torch cleaning and replacement is fast and you'll get reproducible performance
Single, fixed view, of the plasma reduces the ability to reduce interferences. Sensitivity is low for some elements and the linear dynamic range may be low, so high concentration samples have to be diluted	<p>The 5800 and 5900 instruments come in several configurations:</p> <ul style="list-style-type: none"> <li>– 5800 Radial View—for labs needing a fast, high-performance radial ICP-OES</li> <li>– 5800 Vertical Dual View—can switch between axial and radial plasma views in the same method, measuring some elements in axial view and others in radial</li> <li>– 5900 Synchronous Vertical Dual view—can measure every element in every sample in both axial and radial views at the same time</li> </ul> <p>Dual View ICP-OES gives you the maximum flexibility, no matter how complex a sample is, helping you to achieve freedom from interferences, high sensitivity, and excellent linear dynamic range. Dual View also means that you don't need an ionization suppressant. Radial view is beneficial for interference free measurements of major elements including sodium, potassium, and calcium</p>
Instrument takes up lots of bench space	The instruments are both half the size of older instruments such as the 700 series or the Varian Vista.
Receiving samples that have completely unknown elemental content makes it difficult to know the calibration range to create and which wavelength to use for each element to prevent interference from other elements	<p>The IntelliQuant software function can:</p> <ul style="list-style-type: none"> <li>– Identify up to 70 elements in a sample and the relative concentrations of each</li> <li>– Identify spectral interferences and recommend the best analytical wavelength to use</li> <li>– Allow you to spot sample preparation mistakes such as adding the wrong acid or none at all</li> </ul>
Maintenance and cleaning are done based on elapsed time, rather than how many samples have been measured and what type of samples are being run	Smart instrument health tracking uses sensors and counters that alert the analyst when maintenance is needed. The counters monitor the number of samples measured and can be adjusted to suit the type of samples you typically run, so your maintenance schedule is appropriate to maintain instrument performance
Volatile samples have to be carefully introduced or they can cause plasma instability, potentially extinguishing the plasma	The 5800 and 5900 ICP-OES feature a solid-state RF system that can rapidly adjust to changes in plasma conditions, caused by measuring samples with varying matrices. The instruments can handle a wide range of sample types, from volatile organics such as methanol, to brine samples with 30% NaCl
RF power tubes have to be replaced	No replacement RF power tubes are required. The solid-state RF system is maintenance free



The Agilent 5800 takes up half the bench space of a 700 series instrument.

## With end of support approaching, it is time to upgrade your 700 series ICP-OES to a new Agilent 5800 or 5900

### Comparing the 700 series instrument to the 5800 or 5900

The 5800 and 5900 ICP-OES offer:

- 33% less gas consumption
- 50% less power consumption
- 50% less exhaust extraction requirement
- 30% reduced service callouts
- Less consumables costs
- 50% less bench space requirement

### Budget concerns? Get fast, flexible financing through Agilent

Agilent offers a [range of purchasing options](#) including:

- An operating lease (pay for use)
- A capital lease (pay to own)
- Certified pre-owned instruments, refurbished to factory standards
- Short-term rentals and subscriptions.

The operational savings will pay for the new instrument in:

**4.5** years\*

\*The reduced running costs of a 5800 or 5900 ICP-OES, compared to a 700 series instrument starts delivering savings after four and a half years. This cost comparison includes: Instrument purchase, depreciation, operating and servicing costs of a 5800 VDV ICP-OES vs. operating and servicing costs on an existing 720 ICP-OES

# The Integrated, All-Agilent Automation System



## Add automation

Take advantage of a special offer to move your current 700 ICP-OES workflow to an automated Agilent Workflow Automation System. The system includes the instrument, autosampler, switching valve and the new Agilent autodilutor.

This all-Agilent automation system is completely integrated—comprising hardware, software, and support. It's designed to free up your analysts for more productive pursuits. Our simple and reliable single-vendor solution offers automated calibration, dilution, analysis, and reporting to lower your cost-per-sample and turnaround time while improving the quality of your results.

### Our all-Agilent workflow automation systems:

- Are fully-integrated. There's no 3rd party.
- Are optimized for Agilent ICP-OES's.
- Are designed to work as one system, with all settings included in the method and advanced features that can only be achieved when software and hardware are designed as one.
- Offer a simpler purchasing process and faster product support from a single point of contact.
- Require less staff training with only one software platform to learn.
- Contain no surprises. The system is tested to Agilent's strict QC requirements.

For more information visit:

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

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