



The Smart Way to Stop Wasting Time and Get the Right Answers

Agilent 5800 and 5900 ICP-OES spectrometers

5800 ICP-OES

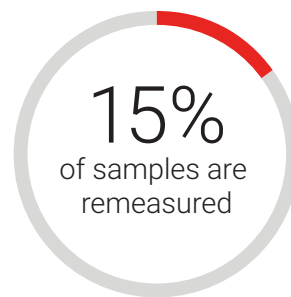
- Smart software tools to provide insight about your samples to get the right answer the first time
- Instrument health diagnosis tools and proactive maintenance alerts avoid downtime
- Able to use 99.99% purity argon to reduce argon costs
- Two configurations: Vertical torch with dual view, and vertical torch with radial view
- Small footprint

5900 ICP-OES

Includes all the features of the 5800, plus:

- Measures both radial and axial views of the plasma in the same measurement, providing accurate results in the fastest time of any ICP-OES, using half the argon of other instruments*
- Built-in seven-port switching valve reduces sample introduction and rinse times

Top lab time wasters



A recent online poll found that labs are measuring 15%, on average, of their 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.

Smart tools to prevent time-wasting instrument downtime and sample remeasurement

The Agilent 5800 and 5900 ICP-OES have an ecosystem of embedded sensors—powerful processors with smart algorithms and diagnostics designed to automate troubleshooting, preempt maintenance, and identify problems that could impact your results.

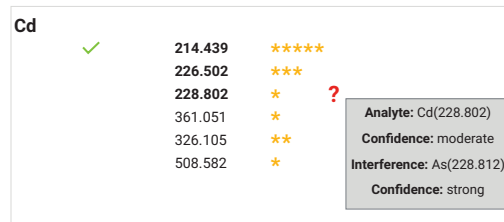
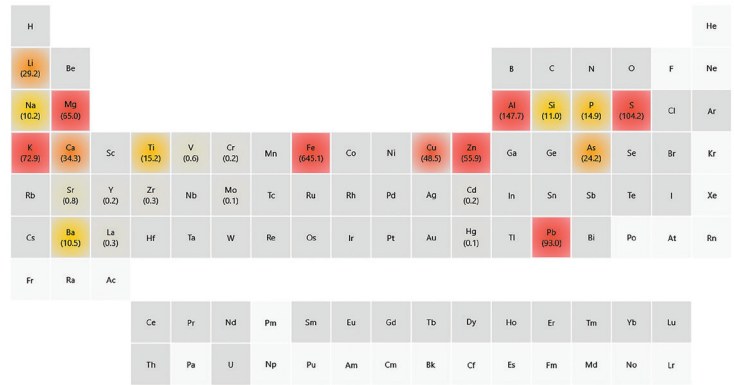
Always working behind the scenes, the instruments think like an expert, and can make recommendations and solve problems before they happen. This smart functionality reduces the number of samples you have to remeasure and gives you more confidence in your results.

* Argon consumption is calculated from argon flow rates multiplied by duration of flow. The analysis speed and gas consumption figures are compared to competitive systems, based on published application data.

IntelliQuant—learn more about your samples

The IntelliQuant software function provides information about the elements in your sample and how best to measure those you are targeting. It will:

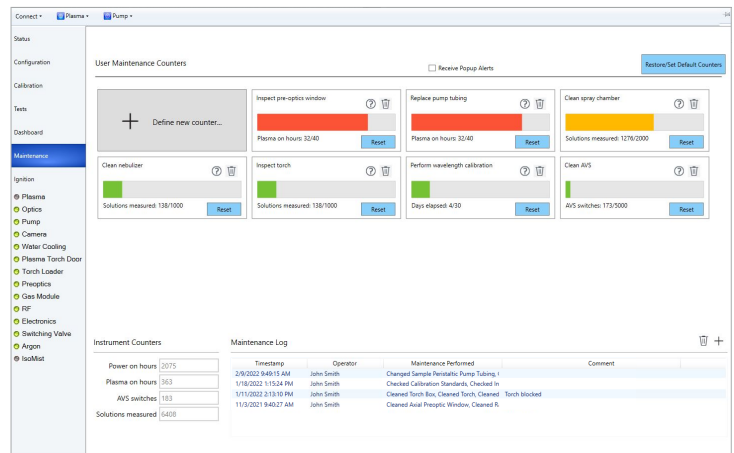
- Identify up to 70 elements in a sample, with a periodic table heat map (refer to upper image on right) showing the relative concentrations of each
- Identify spectral interferences and recommend the best analytical wavelength to use, using a star-ranking system (refer to lower image on right) to guide you in selecting the best analytical wavelength
- Allow you to spot sample preparation mistakes such as adding the wrong acid or none at all
- Flag outlying results, so you can quickly find the results that need to be reviewed



IntelliQuant is like having an experienced analyst inside your instrument.

Smart instrument health tracking

Insufficient maintenance of an ICP-OES can lead to costly unplanned downtime, or analysis failures that cause time-wasting sample remeasurement. Maintenance that is too frequent also wastes time and can increase the cost of consumables. Both the 5800 and 5900 instruments have sensors and counters that alert the analyst when maintenance is needed. The counters (refer to image on right) 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.



The maintenance log digitally records the maintenance history of the ICP-OES allowing an operator or lab manager to easily determine if the instrument has been sufficiently maintained.

The health tracking tools address common reasons for service calls, such as a blocked nebulizer or a plasma that fails to light. By alerting the analyst of a problem and then guiding them through the process of fixing it, the expense and downtime of a service call can be avoided.

For more information visit:
www.agilent.com/chem/icp-oes

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This information is subject to change without notice.

© Agilent Technologies, Inc. 2022
 Published in the USA, April 18, 2022
 5994-1506EN