AGILENT SPS 4 AUTOSAMPLER
INNOVATIVE. ROBUST. PRODUCTIVE.
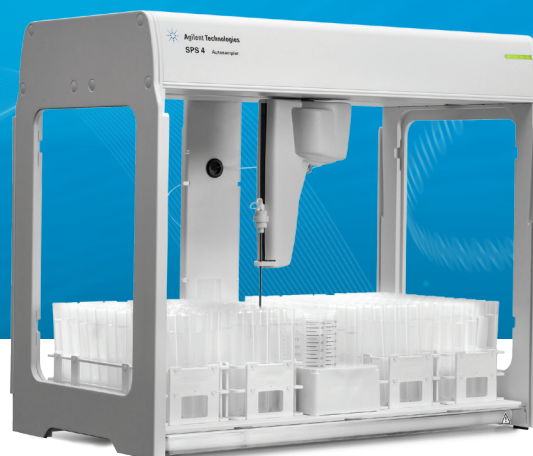
PROMISING 10 YEARS OF VALUE

AGILENT VALUE PROMISE

From the date you purchase the Agilent SPS 4 autosampler, Agilent guarantees at least 10 years' use or residual-value credit towards a replacement model upgrade. Our Value Promise maximizes your return-on-investment by ensuring that your purchase is safe.

Introduction

The SPS 4 is a next-generation, high-performance autosampler for atomic spectroscopy applications. Designed to meet the needs of high-throughput laboratories requiring a fast, high-capacity (up to 360 samples), reliable autosampler, it is also small, quiet, easy-to-use and affordable. The SPS 4 is rugged and robust for FAAS, MP-AES, and ICP-OES users.

Built around an innovative gantry design that supports the mechanical components between two rigid pillars, the SPS 4 provides improved accuracy and precision, high speed, ease of access, and corrosion resistance — all within a footprint that is nearly 40% smaller than other autosamplers in its class.

With the integrated environmental enclosure (optional), the SPS 4 offers maximum sample integrity while protecting your laboratory environment from hazardous sample vapors, all without compromising a millimeter of valuable bench space. In addition, access to the power switch, peristaltic pump, and all electrical and communications ports are outside the environmental enclosure for easy access and protection from corrosion.

Agilent Technologies

Uniquely Agilent in design and compatibility

- Heavy-duty, powder-coated aluminum frame for light weight, maximum rigidity and corrosion resistance.

- User programmable high-speed probe arm assembly and optimized movement for fastest sample-to-sample speed.

- USB plug-and-play connectivity allows fast and easy setup.

- Integrated spill tray contains accidental spills, protecting the laboratory bench and simplifying cleanup.

- Standards rack and rinse port are centrally located for the fastest access and maximum throughput.

- All electronic and mechanical components are located in top gantry, away from liquid spills, for long life and easy maintenance.

- Compatible with Agilent's FAAS, MP-AES, and ICP-OES instruments.

- Modern industrial design combines well thought out robustness and performance characteristics with a sleek, eye-catching profile that coordinates with Agilent's newest MP-AES and ICP-OES designs.

Flexible rack configuration enables wide range of sample capacities

- Compatible with a wide range of commercially available (Bel-Art) metal-free sample racks, including 90-, 60-, 40-, 24-, and 21-position racks.

Rack capacity (# tubes)	Tube OD (mm)	Maximum tube height (mm)
90	13	150
60	17	150
40	20	150
24	25	150
21	30	150

- Rack configuration is user selectable, and rack sizes can be mixed and matched as needed.

- Central standards rack is configurable to support either a 34 position (twelve 29 mm OD tubes plus twenty two 17 mm OD tubes) or 5 position (five 61 mm OD bottles) rack.

- Four sample rack capacity supports up to 360 samples, permitting long unattended runs in high-throughput labs.

Leading the way in atomic spectroscopy innovation

The SPS 4 is compatible with Agilent's FAAS, MP-AES, and ICP-OES instruments.

Agilent SPS 4

Agilent AA

Agilent MP-AES

Agilent ICP-OES

Integrated environmental enclosure option protects your samples and your laboratory environment

- Maintain maximum sample integrity by protecting samples from the lab environment.

- Protect operators and laboratory instrumentation from corrosive sample vapors.

- Fully integrated environmental enclosure takes up no extra valuable bench space.

- When the environmental enclosure is fitted, sample visibility remains unrestricted, as well as sample access from the front when the door is in the raised position.

- Vertically sliding front access door can be fixed open for easy access to samples.

- Electrical and plumbing connections remain outside the environmental enclosure for easy access with the cover in place.

- Environmental Enclosure Kit includes a 50 mm (2 in) extraction air duct fitting that can be fitted to either side of the autosampler as needed.

**Dual-wash reservoir option eliminates potential carryover**

- Optional dual-port wash reservoir for applications requiring two different rinse chemistries.

Three-channel peristaltic pump for ultimate flow-through rinse flexibility

- Simultaneously pump two different rinse solutions (in conjunction with the optional dual wash reservoir)

- Third channel still allows for a pumped drain when a gravity drain is not an option.

Multiple probe size options for a diverse range of applications

- A range of carbon fiber—reinforced fluoropolymer probes suit all applications from microvolume sampling to high-speed discrete sampling.

- Programmable probe speed in 3 axes for the ultimate performance with all sample types.

- Intelligent probe acceleration and deceleration permits high speed while minimizing spattering.

- Programmable probe depth for sedimentary or separated layer samples.
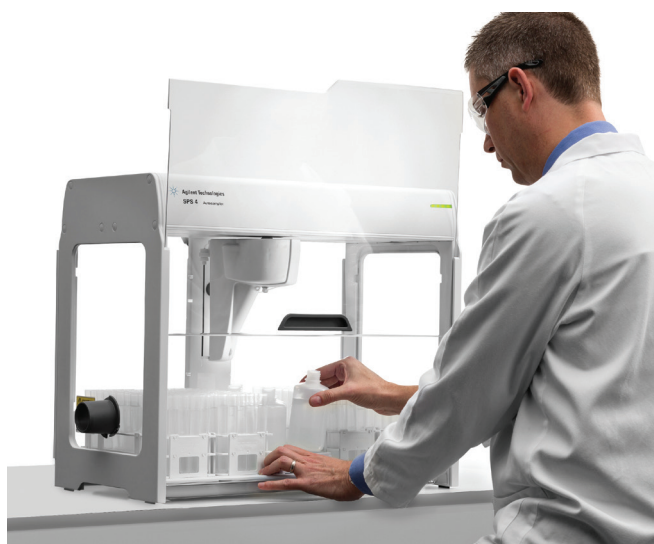
SPS 4 autosampler shown with optional integrated environmental enclosure. Front cover shown in fixed open position for easy access to samples.

Specifications

Dimensions: Width 600 mm (23.6 in), Depth 320 mm (12.6 in), Depth 363 mm including peristaltic pump (14.3 in), Height 510 mm (20.1 in)

Weight: 15 kg (33.1 lbs)

Probe arm speed: User programmable in X, Z, and Theta (rotational) dimensions. Optimized sample-to-sample probe movement time for corner-to-corner travel in less than 3 seconds.

Axis	Minimum speed	Maximum speed
X (mm/sec)	14.5	1016
Z (mm/sec)	8.6	518
Theta (degrees/sec)	9	540

Rinse port flow rate: Programmable, up to 50 mL/min depending on pump tube diameter.

Communication: USB 2.0 (full speed) virtual com port with plug-and-play capability.

AUX interface: RS485 for future upgradability to external device control.

Power requirements: 100–240 VAC, 47–63 Hz, 1.5 A

Built-in diagnostics: The SPS 4 includes a row of four LEDs on the front panel that indicate the operational or error status of the instrument.

Supported instruments:

AA[a]	MP-AES[b]	ICP-OES[c]
55B (computer controlled)	4100	5100
240FS	4200	
280FS		
a. Requires SpectrAA software version 5.3 or above.	b. Requires MP Expert software version 1.5.1 or above.	c. Requires ICP Expert software version 7.1 or above.

Genuine Agilent supplies for flexible sample handling and maximum productivity

Agilent supplies for the SPS 4 autosampler are designed to give flexibility in sample handling and maintain the high performance of your system. With a wide range of sample racks and vessels supporting small or large sample volumes, probe options and interface supplies, we can help keep your lab running at maximum productivity.

Learn more: **www.agilent.com/chem/AtomicSupplies**

For more information:
Contact your local Agilent representative or visit:
www.agilent.com/chem/atomic

The Measure of Confidence

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