Sage Gas Autosampler

High-precision, automated gas and isotope sample analysis
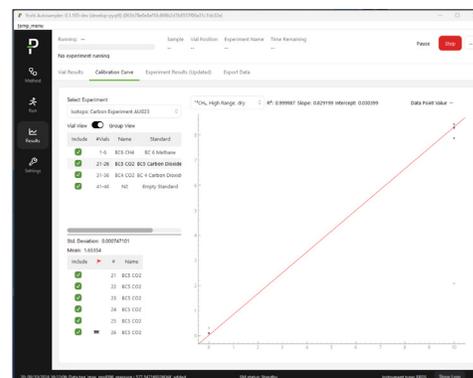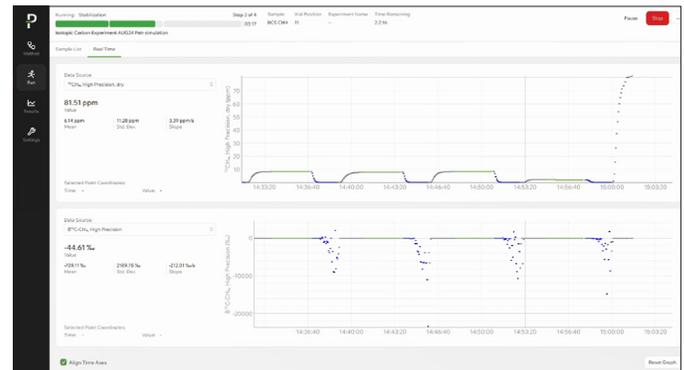
PICARRO

- Automated operation simplifies gas sample analysis

- High-capacity 150-vial rack for 12mL headspace vials boosts throughput

- Seamless integration with Picarro analyzers streamlines workflow

- Software compatibility ensures efficient, user-friendly data analysis

The **Picarro A0344 Sage** gas autosampler is an advanced solution designed to automate the measurement of greenhouse gas (GHG) concentrations and stable isotope ratios in small discrete gas samples. It addresses the need for high-precision, low-maintenance systems in GHG and isotope analysis, making it the ideal tool for researchers who require efficiency and reliability.

This autosampler offers automated operation, working seamlessly with a variety of Picarro gas analyzers to ensure accurate, high-quality results. The 150-position vial rack, compatible with 12mL headspace vials, allows for high-throughput sample analysis, making it a practical choice for labs handling large volumes of samples. It is also capable of automatically evacuating vials with the A0346 Sage Sample Preparation Kit, leading to increasing workflow efficiency.

The Sage is fully integrated with Picarro's suite of analyzers, creating a seamless workflow from sample introduction to data acquisition. The system's intuitive software allows for automated data analysis and easy export of results, accelerating the data review process. Additionally, the real-time preview feature provides immediate visualization of processed data, enabling researchers to quickly assess the results and make informed decisions. Automated calibration can be achieved with a minimum of two reference gases.

By simplifying the entire workflow, from sample handling to data analysis, the Sage enhances lab efficiency while maintaining the precision required for advanced GHG and isotope measurements.

Figure 1 - Powerful new software tools generate real-time data visualizations, calibration curves, and other actionable data for faster, easier sample analysis and interpretation.

A0344 Sage System Specifications

Parameter	Notes
Maximum Number of Vials	150
Needle	Picarro recommends BD PrecisionGlide™ 22 G X 1" Hypodermic Needles. Equivalent syringes from other manufacturers may be used.
Vials	Labco 12mL DW Exetainer vials (pressurized with up to 30mL for concentration measurements).
Software	On board software ensures seamless operation, automated data analysis, and real-time preview
Operating system	Compatible with Windows 10, Windows 11, and Linux Ubuntu 20.04
Dimensions	17" w x 13" h x 12.2" d (43.3 x 33.2 x 30 cm) not including 0.25" feet Back clearance: 2.5" (65 mm)
Weight	24.5 lb. (11.1 kg)
Power Requirement	110/230 VAC, 50/60 Hz Note: Only use power adapter supplied by Picarro
Operating Temperature	4°C to 40°C
Storage Temperature	4°C to 50°C
Relative Humidity	10% to 75% non-condensing
Carrier Gases	Zero air (UHP) or N_2 (UHP) depending on sample matrix at 2.5psi.
Optional Accessory	A0346 Sage Sample preparation Kit, includes items for automated vial evacuation and 100 vials. Ask a Picarro representative for more information on automated vial filling and dilution capabilities with Sage autosampler.

Compatible Analyzers

Model Number	Gases Measured
G2131-i	$\delta^{13}C$ in CO_2
G2201-i	$\delta^{13}C$ in CO_2 and CH_4
G2210-i	$\delta^{13}C$ in CH_4, CH_4 and C_2H_6
G2301	CO_2, CH_4, and H_2O
G2401	CO_2, CO, CH_4, H_2O
G2508, G2509*	N_2O, CH_4, CO_2, NH_3**, H_2O
G5131-i	$\delta^{15}N$, $\delta^{15}N\alpha$, $\delta^{15}N\beta$, and $\delta^{18}O$ in N_2O
PI5131-i	$\delta^{15}N$, $\delta^{15}N\alpha$, $\delta^{15}N\beta$, and $\delta^{18}O$ in N_2O
G5310	N_2O, CO, H_2O
PI5310	N_2O, CO, H_2O

*Applicable for limited use on G2509; talk to a Picarro representative for more details.

**Sage is not intended to use for NH_3 measurements