



## Low-Volume Autosampler for Liquids

With our Low-Volume Autosampler for Liquids, quicken your workflows with the high-throughput SAXS analysis of liquid biological samples as well as nanoparticle dispersions. Due to the autosampler's robust design, get precise and reliable (Bio-)SAXS results and eliminate the potential for cross-contamination.

High-throughput SAXS analysis of precious liquid samples



## Minimal sample volume reduces costs and future headaches

The Low-Volume Autosampler for Liquids is a powerful autosampler that measures up to 192 liquid samples in one run using the SAXSpoint 5.0 system and with which you can even process small sample volumes down to 5  $\mu\text{L}$ . The autosampler combines a sampling and measurement unit with an automated cleaning station and a temperature-controlled well plate compartment. Since you don't need consumables such as pipette tips, you reduce your costs on materials and avoid possible problems like bubble formation and cross-contamination.

### Total automation gives you total control

The Low-Volume Autosampler for Liquids is fully integrated in the SAXSdrive measurement software, so you can program and run measurement series of as many as 192 liquid samples completely automated and unattended. A video camera precisely monitors the sample position during the SAXS measurement. For long measurement runs (e.g., overnight), you can monitor and control the autosampler via remote access.

### Sample temperature control gives you a range of options

You can control the sample temperature during measurement and storage: Cool down precious and temperature-sensitive samples (e.g., biological materials) to 5  $^{\circ}\text{C}$  in the well plates while waiting for the measurement or heat up samples to 50  $^{\circ}\text{C}$  for conducting long-term stability studies. During measurement, you can precisely control the sample temperature between 5  $^{\circ}\text{C}$  and 70  $^{\circ}\text{C}$  to perform in-situ, temperature-dependent SAXS experiments.

### Automated cleaning routines prevent cross contamination

The fast and thorough cleaning routines clean the entire fluid path of the sampling and measurement compartment effectively with up to two different cleaning liquids. It dries quickly with dry air or nitrogen. You don't need to use consumables like pipette tips, so each sample touches only the needle and sample cell that have been cleaned and dried.

### Full flexibility so you can work in other sample environments

SAXSpoint 5.0, with the Low-Volume Autosampler for Liquids, is the only available system on the market that lets you quickly switch to other sample environments. Unlike other comparable systems, you can quickly uninstall the LVA unit to easily change the measurement setup to work with other sample stages (e.g., GISAXS, SAXS/WAXS stages for solid and powder samples, RheoSAXS and more).



### Features and benefits

- High sample throughput of precious samples gives you maximum efficiency
- Conduct SAXS measurements with minimal sample volume (down to 5  $\mu\text{L}$ )
- Reliable sample handling and positioning ensure precise scattering results
- Precise control of the sample temperature during measurement and storage
- Modular design lets you easily switch to other SAXS/WAXS/GISAXS sample stages, giving you flexibility for future needs
- Fast, thorough, and effective cleaning and drying protocols prevent cross-contamination
- No consumables (e.g., pipette tips) needed – reduce your costs and ecological footprint

### Technical Specifications

Sample volume	Min. 5 $\mu\text{L}$
Sample temperature control	5 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$
Storage temperature	5 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$
Cooling/Heating	Peltier
Integration	Fully integrated in SAXSpoint 5.0 system. Easy switch-over to other sample stages.

Your distributor: