

USAXS Module for SAXSpoint

Our USAXS Module for SAXSpoint is a user-friendly, automated, experimental solution for characterizing materials from the nanometer to the micrometer scale. With its high-quality precision components, get precise, combined USAXS, SAXS, and WAXS data.

Your solution for analyzing nanometer- to micrometer-sized structures

Get USAXS/SAXS/WAXS information in one run

The USAXS Module for SAXSpoint is a fully motorized experimental setup for sequentially detected scattering data from ultra-small to small and wide scattering angles. Resolve a sample's structural information – from Ångstroms to > 2.5 micrometers – in one go by acquiring full-range USAXS, SAXS, and WAXS scattering curves, which are automatically measured with the Bonse-Hart ultra-small-angle X-ray scattering module. It's completely integrated in the SAXSpoint system hard- and software so you don't have to manually change its measurement configuration.

High-quality components give you precise results

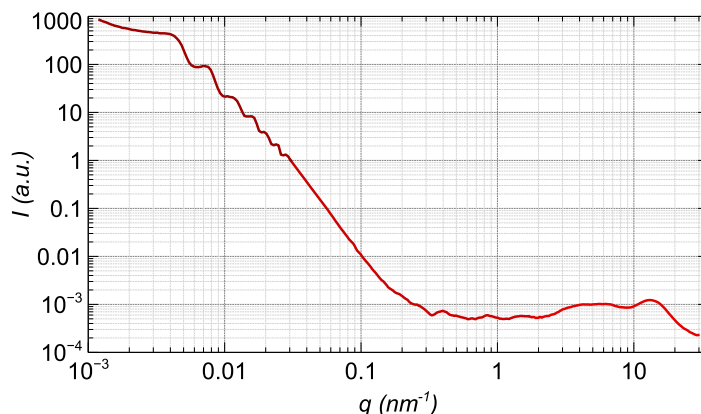
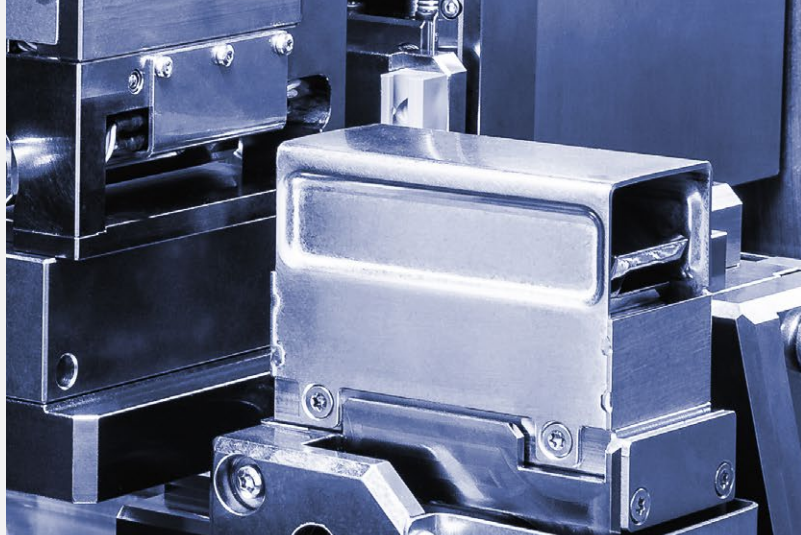
We've used only the highest-quality components in the experimental USAXS setup. The integrated channel-cut crystal assemblies are mounted on precise base stages, enabling automatic positioning of the crystal assemblies in the X-ray beam before and after the sample. A highly accurate goniometer scans the scattering signal, which is detected by the high-resolution EIGER2 R 1M hybrid-photon counting (HPC) detector. This combination gives you scattering results at maximum precision. In addition, our well-known and reliable temperature-control stages control the sample temperature precisely. These ensure constant conditions throughout your entire scattering experiment.

Full flexibility for full independence

The USAXS Module for SAXSpoint lets you quickly switch to other sample environments. You can easily uninstall the module and easily change the measurement setup to work with other sample stages (e.g., GISAXS, tensile stress/strain SWAXS, RheoSAXS).

Features and benefits

- Automatic, sequential acquisition of USAXS, SAXS, and WAXS data
- Resolving structural information from Ångstroms to > 2.5 micrometers in one run
- Highly precise components ensure reliable, precise scattering results
- Modular design lets you easily switch to other SAXS/WAXS/GISAXS sample stages, which gives you flexibility for other experiments
- High degree of automation – no manual interaction required – eliminates user errors



USAXS/SAXS/WAXS pattern of dry 1.5 µm silica spheres

Technical Specifications

Accessible q-range	0.0012 nm ⁻¹ to 30 nm ⁻¹
Compatible sample holder units*	TCStage 150 and 350, Heated/Cooled Sampler, Heated Sampler
Temperature range	-10 °C to +350 °C
Integration	Fully integrated in SAXSpoint 5.0 system. Automatic USAXS, SAXS, WAXS measurements.

Your distributor: