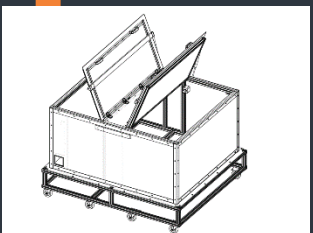
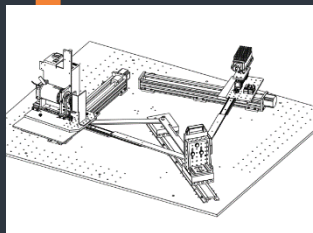




easyXES100

Versatile, User-Friendly, Lab-Based XES and XAFS with Synchrotron-quality Spectra



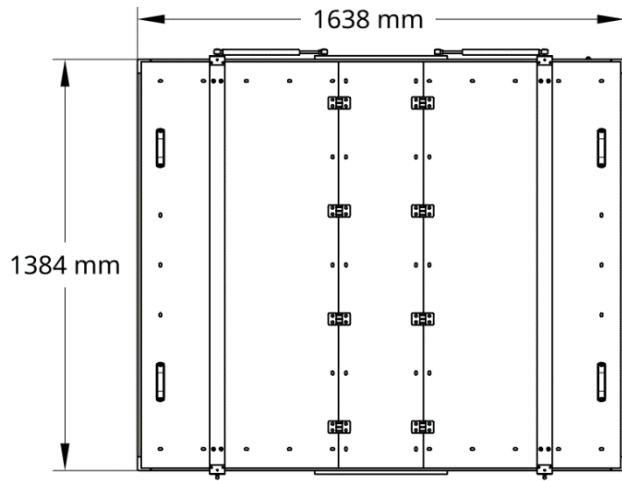
- Easy switching between XES and XAFS modes
- High performance XES with main line and valence-to-core capability
- Routine analytical performance for transmission-mode XAFS.
- Virtual beamline appearance with fully supported, easy to use software
- Run multiple samples or sample conditions with scripted operations
- Easy integration with ancillary equipment for control of sample conditions.
- Extremely low maintenance

Product Specifications

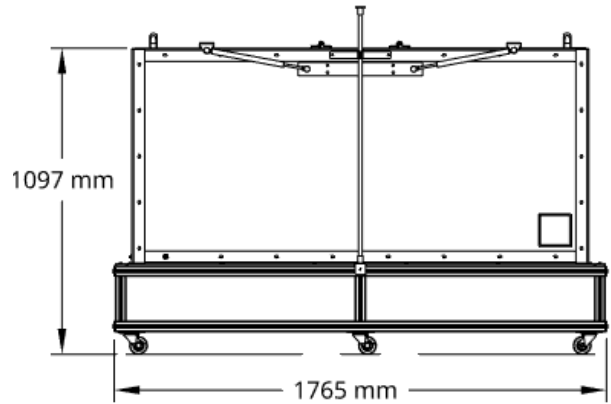
Energy Range	Standard operations from 5-12 keV. Some utility up to 19 keV
Angular Range	55-85 degrees Bragg angle
Resolution	Typically 0.5-1.5 eV near backscatter for 7-9 keV
Reproducibility	<50 meV energy scale drift with no monochromator realignment
XES Flux	Core-hole generation rate of $\sim 10^{12}$ /s for concentrated samples
XAFS Flux	Typical monochromatic flux of 100,000-150,000 photons/s when working near backscatter for 7-9 KeV
Utility Requirements	Flexible electricity requirements; helium gas for flight path

X-ray Source	100-W air cooled XRF-type tube (Pd or W anode material)
Analyzer Crystals	Spherically-bent Si or Ge analyzers with 10-cm diameter and 100-cm radius of curvature
Analyzer Alignment	Pre-aligned with "clock angle protocol" (pat. pend.) for rapid (~5 min) and reproducible swapping
Detector	Large-area SDD for rejection of background and harmonics
Sample Turret	7-position, motorized sample wheel available for programmable XAFS studies
Software	LabVIEW-based GUI for calibration, regular operations, scripted scans and easy integration with external equipment
Timeline	Delivery 15 weeks ARO; rush orders possible on a case-by-case basis

Dimensions

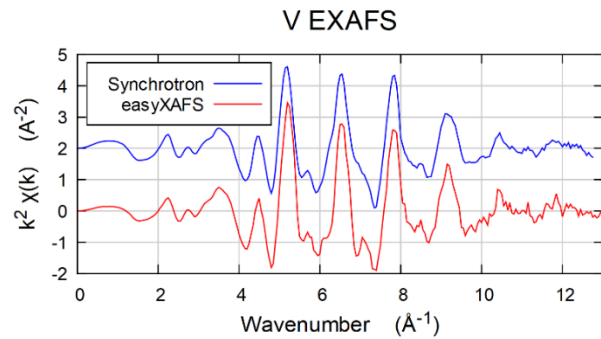
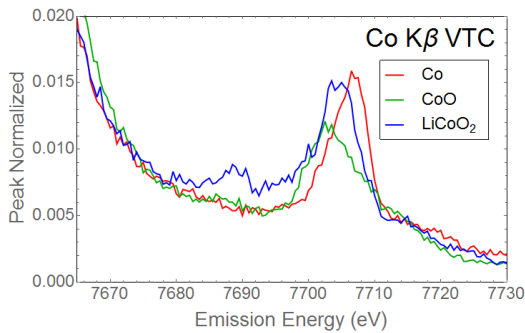
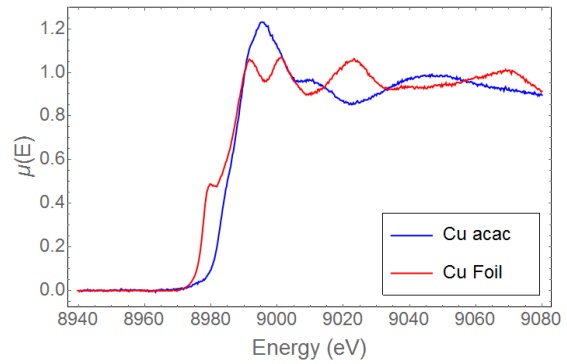
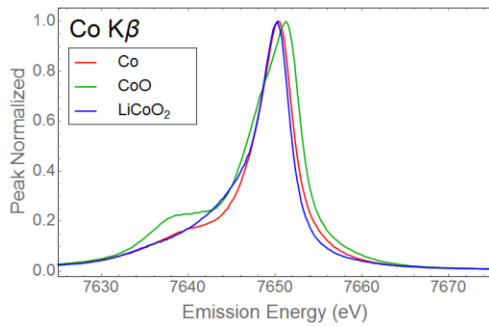


Top View



Side View

Example Data



easyXES150 upgrade

The upgraded “easyXES150” spectrometer uses 0.5-m curvature analyzers for a **2X boost in flux** and **25% reduction in footprint**. It also features a “fixed-source” geometry for maximum flexibility in XAFS sample cell environments. The easyXES150 is compatible for future upgrade into an “easyXAFS300 system”.

