

LK TECHNOLOGIES ELECTRON SOURCES

Advancing the Science of Electron Spectroscopy

Model LK1000M

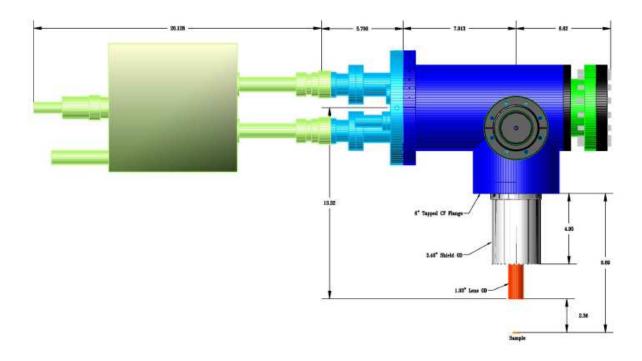
High Resolution Electron Monochromator



The LK1000M is an electron source of excellent energy resolution optimized for high output current. Application to inverse UPS, EELS and other electron impact experiments.

- Energy resolution below 10 meV adjustable with pass energy
- Typical output current > 10 nA at 20 meV energy resolution
- Single-pass, double-focusing monochromator with space charge optimization
- 5 element zoom lens/transfer lens for long working distance
- Integral magnet shielding
- Rotatable sources available for angle dependent studies

The double-pass LK5000M electron source is available for demanding applications down to 0.5 meV energy resolution. Please visit our website or call for details.



Specification:

Please see drawing for basic dimensions

Model LK1000M Monochromator

This is a high performance toroidal style (double focusing) single pass monochromator mounted in subchamber with transfer lens.

The unit will operate from 0 to 300 eV and will provide an output current of > 10 nA at 20 meV resolution. The current will be substantially higher at lower resolution which will be adjustable with the pass energy. The limiting resolution of the monochromator will be better than 10 meV.

The lens system includes a 5 element zoom lens/transfer lens combination.

The subchamber includes a mounting flange for monochromator and magnetic shield lining.

Nominal spot size is 1 mm at standard focal operating distance and will get smaller with increasing energy. Spot may be defocused to larger diameter with lens adjustments.

Model LK100M-DAC Control System

Digital control electronics package for control of the monochromator. Includes digital control of voltages and readout of critical currents. Package includes noise reduction filter, power supply, interface equipment. Includes Windows based software for data acquisition and control of voltages. Operation is for 0-300 eV kinetic energy. Software will operate under Window XP and a PC compatible computer with interface cards will be provided.