

GENERAL DESCRIPTION

The Model 234/302 Vacuum Monochromator can be configured as a double monochromator too! Double dispersion and low stray light in a vacuum compatible package. Mechanically linked versions may be built to simplify tracking between gratings. These units must be specified at time of original purchase. Alternately, units can be combined and operated synchronously with independent scanning drives. Local calibration via computer permits improved tracking.

SEYA-NAMIOKA WITH 180 DEGREE OPTICAL PATH, MCPHERSON 234/302D

OPTICAL SPECIFICATIONS:

| | |
|-------------------------|---|
| Focal Length | 200 mm \pm 200 mm |
| Aperture | f/4.5 |
| Wavelength Range | 300 - 2,400 Å |
| Resolution | 0.5 Å |
| Dispersion | 20 Å/mm |
| Stray Light | 1 part in 10^{-7} |
| Grating Turret | 2x triple grating turret, in vacuum indexable |

MECHANICAL SPECIFICATIONS:

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|----------------------------|---|
| Slits | width in vacuum adjustable from 10 μ m to 1,000 μ m, can be set in height from 1 to 20 mm |
| Drive Accuracy | 1 Å |
| Drive Repeatability | 0.5 Å |
| Base Vacuum | 10^{-10} mbar range |
| Construction | 304 stainless steel |
| Bake Temperature | 120° C (no optics) |
| Flanges | metal seal conflat™ type |
| Orientation | selectable, 0° or 90° with respect to beam |

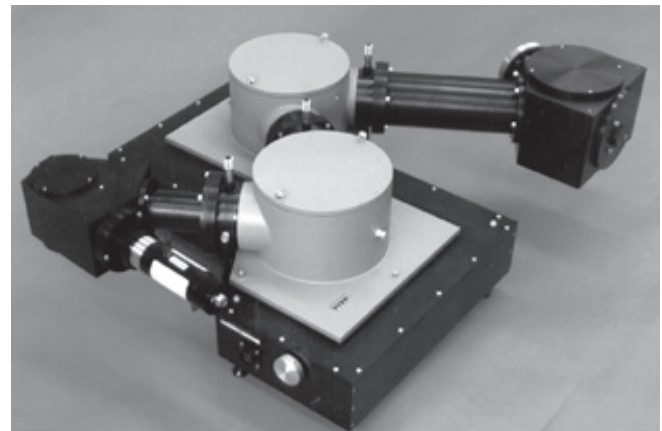
ELECTRICAL SPECIFICATIONS:

| | |
|---------------------|---|
| Drive System | 2x, 36,000 step per revolution motor drive with manual, front panel & RS -232 control |
| Software | LabView VI available to drive system and acquire data |

This 200 mm focal length double is also available in 10^{-10} torr compatible ultra high vacuum (UHV) versions.



This unique Double Monochromator functions in the vacuum and deep UV. With two reflective optics the range of operation may be restricted by the reflectivity of these optics and the energy available in your source.



Model 234/302D Double Vacuum Spectrometer system providing pure excitation energy to semiconductor samples, where the resulting luminescence is of interest. The system uses a 150 Watt Deuterium source as well as an optic for energy collection and f/number matching on both the entrance and exit ports. This system has a direct mechanical drive for both gratings for improved tracking across a broad spectral region.