



VM92 VUV Monochromator and Spectrometer



The Resonance Ltd. vacuum monochromator and spectrometer uses standard connections to allow simple integration into most systems. The f/2.2 grating is a type 4 for minimal aberrations. It is designed to allow easy interchangeability between being a monochromator and a CCD-based spectrometer. It's supplied with LabView-based codes and drivers for integration into user software.

The VM92 packs performance in a small package. The compact 1.7-kg system can be coupled directly to a vacuum chamber through a 2.75" Conflat™ style flange. Its single-grating design provides high VUV efficiency while the 92mm focal length offers an excellent balance between size and functionality.

The system can be configured as a manual monochromator, a motorized monochromator or as a CCD spectrometer using interchangeable accessories.

Features

High throughput f/2.2

Spectral range from 25-600nm

Single concave grating for high VUV efficiency

Easily switched from a monochromator to a CCD-based spectrometer

Only 1.7kg mass, 1 liter internal volume

Fixed interchangeable or adjustable slits

LabView-based software

VM92 Specifications	
Focal Length	92mm
F/No	2.2
Wavelength Range	25 - 600nm
Resolution	1nm with 150 um slit
Wavelength Accuracy	+/- 0.3nm with standard grating
Wavelength Reproducibility	+/- 0.2nm
Dispersion	5.5 nm/mm
Focal Plane	30mm max. width
Standard Grating	1800 G/mm
Grating Size	37 x 37mm
Standard CCD	Phosphor coated 28mm 2048 pixels
Standard Interchangeable Slits	25 - 4000 um width
Adjustable Slits Option	25 - 4000 um width
Quantum Efficiency (@150nm)	>15%
Stray Light	<2 x 10 ⁻⁴ in VUV
Ultimate Vacuum	<10 ⁻⁶ torr
Dimensions	18 cm dia. 16cm height main body



