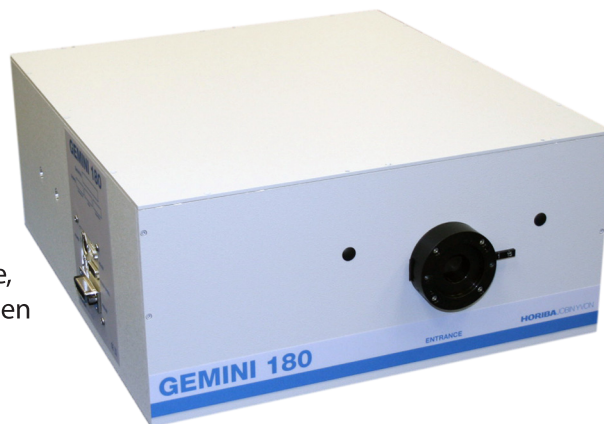


## Gemini 180: Double Additive Monochromator

The Gemini 180 is a fully automated, double additive grating scanning monochromator. The incorporation of toroidal optics provides for optimum throughput and spectral resolution. It is ideal for applications that require low stray light including Transmission, Absorbance, Reflectance, and Fluorescence. The Gemini 180 also functions as a high power, high purity light source for Fluorescence, Detector Characterization, and microscope illumination when coupled with our FL-1039 (450 W Xe Light Source).



### Specifications

Focal Length	180 mm	
Aperture	f/3.8	
Mechanical Range	0 - 1400 nm	
Grating Size	50 mm x 50 mm	
Resolution	0.15 nm	
Wavelength Accuracy	±0.05 nm	
Repeatability	±0.1 nm	
Spectral Dispersion (@ 500 nm)	2.1 nm/mm	
Stray Light	1 x 10 <sup>-9</sup>	
Step Size	0.06 nm	
Computer Interface	RS232/IEEE-488	
Dimensions	Length	52.2 cm (22.5 in)
	Width	41.3 cm (16.3 in)
	Height	19.1 cm (7.5 in)
Weight	18.1 kg (40 lb)	

All specifications given for 1200 g/mm grating and are subject to change without notice.

### Fully Automated

The Gemini 180 is fully automated, including the scanning drive, slits and shutters. The direct digital drive is self-calibrating. A single drive train is used to move each of the kinematically mounted gratings. One grating of the drive is coupled directly to the stepper motor while the second grating follows the rotation of the first via a metal belt transmission to ensure the best wavelength coupling between the two stages.

### Features

- Direct drive coupled-scanning via single stepper motor
- Double Czerny-Turner with toroidal optics providing maximum throughput
- Kinematic grating mounts
- Fully automated slits & accessories (fixed slits available for radiometry)
- Built in computer interfaces (RS232 & IEEE-488)