

M300
Single Monochromator

M300 Monochromator

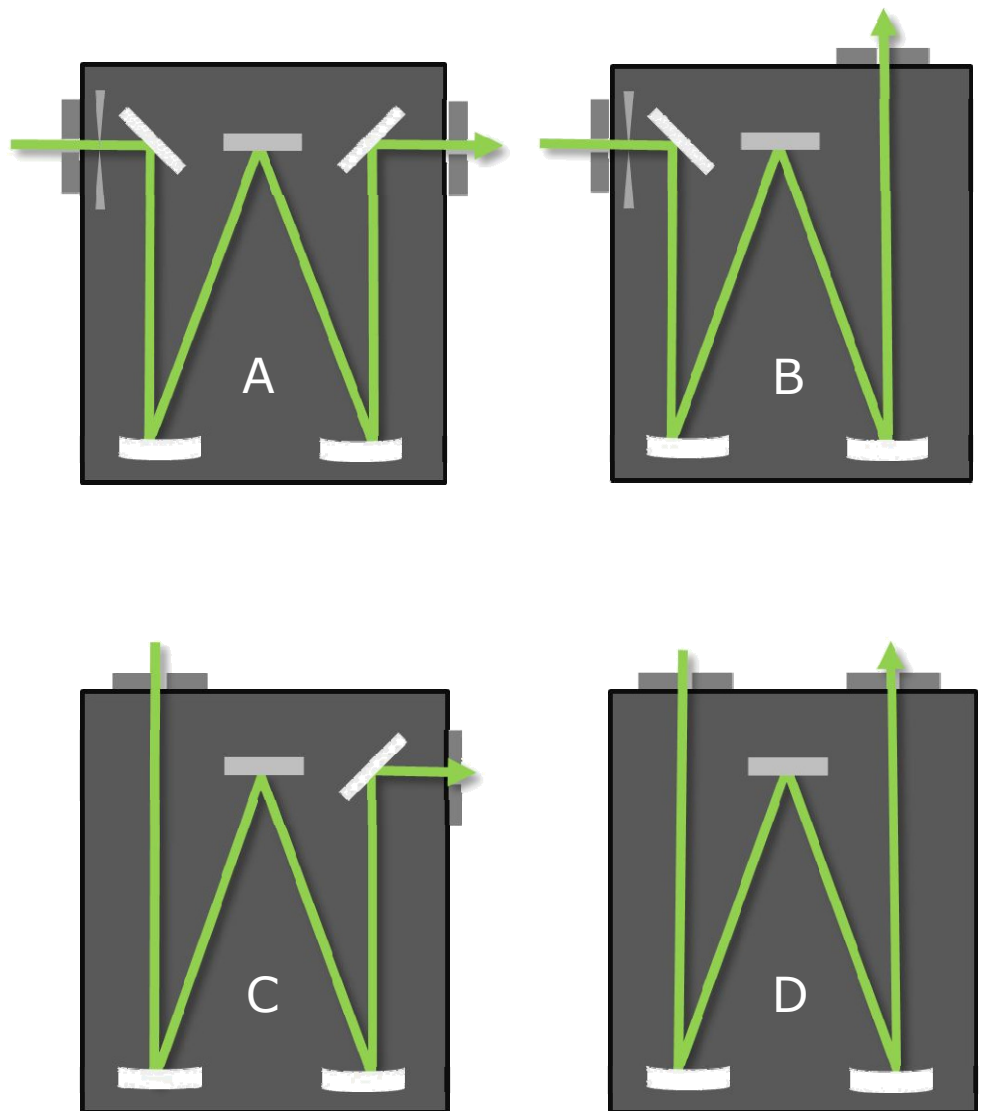
The M300 single monochromator, the first monochromator model introduced by Bentham over thirty-five years ago, remains popular thanks to its compact size and simplicity, ideal for dedicated applications.

Compatible with the full range of sources, detectors and accessories of the Bentham portfolio, the M300 monochromator has been deployed in an exceptional range of measurements throughout the UV, visible and IR.

Key features:

- 300mm focal length single monochromator in Czerny-Turner configuration
- Accommodates single kinematically-mounted diffraction grating
- One entrance slit and one exit slit with multiple configurations available
- Fully automated through USB 2.0 interface

Configurations (typical)

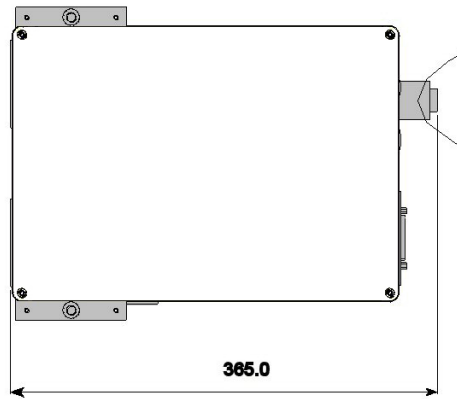


Specification

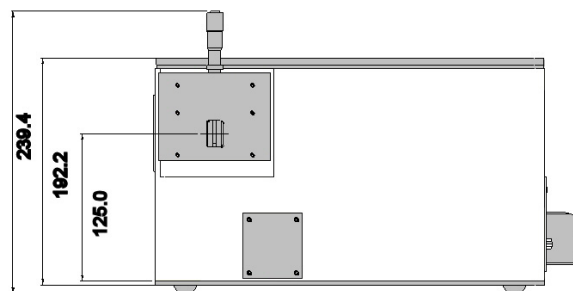
Optical Layout	
Configuration	Symmetrical Czerny Turner
Focal length	300mm
Grating mount	Kinematic mount
Number of gratings	1
Grating size	69 x 69mm
Aperture ratio	f/4.2 (at all grating angles)
Number of entrance/exit ports	One entrance, one exit
Opto-Mechanical	
Slit type	Fixed, micrometer or motorised variable
Slit width & height	10µm-10mm (W) x 20mm (H)
Filter size	25mm diameter
Optical Performance (quoted for 1200 g/mm gratings)	
Spectral range	Within range 200nm-50µm
Linear dispersion	2.7nm/mm
Wavelength accuracy	± 0.2nm
Wavelength reproducibility	± 0.05nm
Resolution full/ reduced slit height	0.3/0.1nm
Stray light rejection at 2.5 FWHM	10 ⁻⁵
Wavelength acquisition speed	15nm/s
Automation	
Computer interface	USB
Software Control	BenWin+ / SDK
Electrical/ Mechanical	
Overall dimensions	365D x 266W x 239.4H mm
Optical height	125mm
Weight	Approx. 12 kg
Power supply	Mains input 110/220V 50/60Hz
Options	
Diffraction gratings	See separate Diffraction Gratings datasheet
Order sorting filters	See separate Order Sorting Filters datasheet
Filter wheel	252-6 or 252-8 (6/8-position filter wheel,

M300 Dimensions

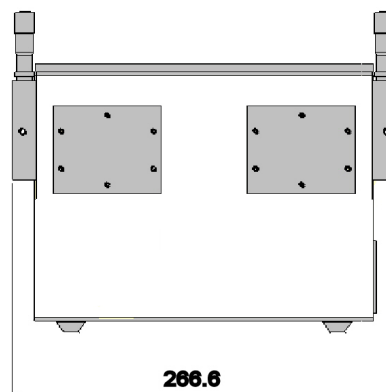
Top view



Side view



Front view



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