

**TMc150**  
**150mm focal length**  
**Monochromator with dual grating turret**

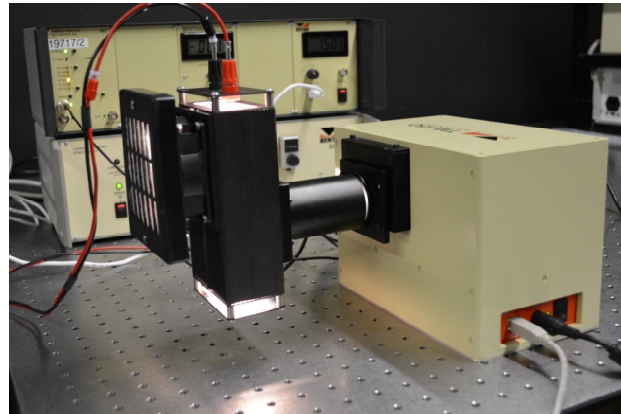
# TMc150 Monochromator

The TMc150 single monochromator represents an exceptionally compact measurement solution adapted to measurement where lower spectral resolution is required.

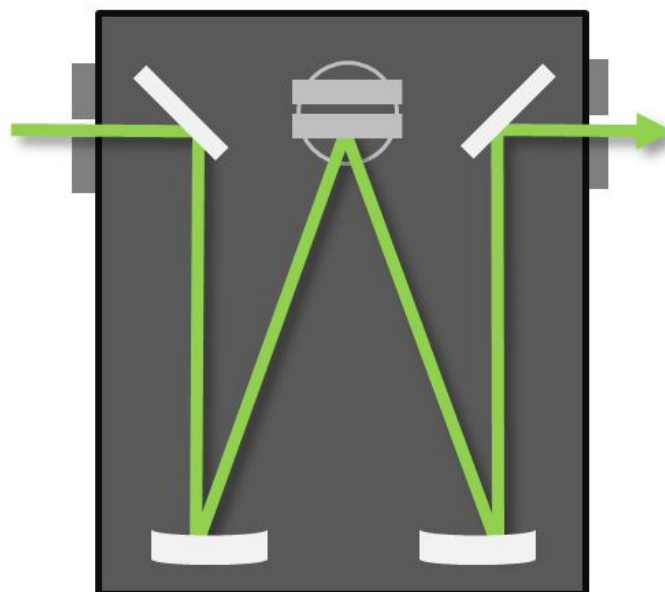
Compatible with the full range of sources, detectors and accessories of the Bentham portfolio, the TMc150 monochromator fits in the smallest of spaces in a measurement set-up and is well-suited to integration into an OEM system.

## Key features include:

- 150mm focal length single monochromator in Czerny-Turner configuration
- Accommodates up to two diffraction gratings to allow single-scan measurement over wide spectral range included in range 200nm-50 $\mu$ m
- One entrance and one exit slit
- Fully automated through USB 2.0 interface



## Configuration

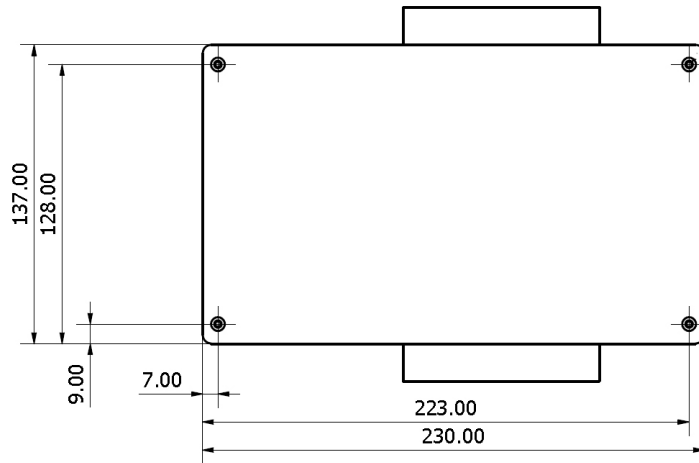


# Specification

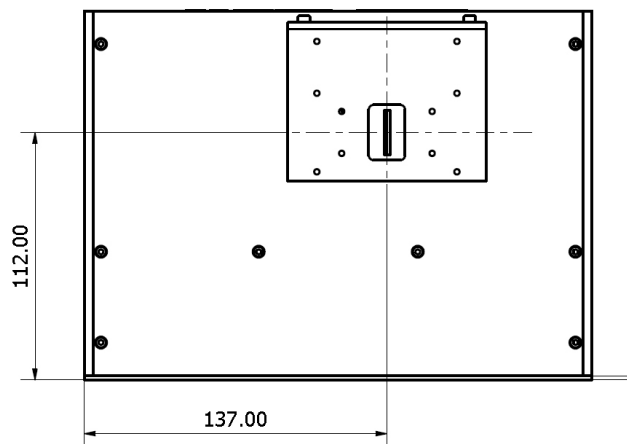
<b>Optical Layout</b>	
Configuration	Symmetrical Czerny Turner
Focal length	150mm
Grating mount	Dual grating turret
Number of gratings	1-2
Grating size	30 x 30mm
Aperture ratio	f/4.2
Number of entrance/ exit ports	1 entrance, 1 exit
<b>Opto-Mechanical</b>	
Mechanical resolution drive	0.000072°/ step
Slit type	Fixed, micrometer or motorised variable
Slit width & height	10µm-10mm (W) x 20mm (H)
Filter size	25mm diameter
<b>Optical Performance (quoted for 1200 g/mm gratings)</b>	
Spectral range	Within range 200nm-50µm
Linear dispersion	5.4 nm/mm
Wavelength accuracy	± 0.3nm
Wavelength reproducibility	± 0.01nm
Resolution full/reduced slit height	0.3/ 0.2nm
Stray light rejection at 2.5 FWHM	10 <sup>-5</sup>
<b>Automation</b>	
Computer interface	USB 2.0
Software control	BenWin+/SDK
<b>Electrical/ Mechanical</b>	
Overall dimensions	137W x 232D x 168H mm
Optical height	110mm
Weight	6 kg
Power supply	External DC p.s.u.
<b>Options</b>	
Diffraction gratings	See separate Diffraction Gratings datasheet
Order sorting filters	See separate Order Sorting Filters datasheet
252-6	6-position order-sorting filter wheel (filter diameter 23mm)

# TMc150 Dimensions (mm)

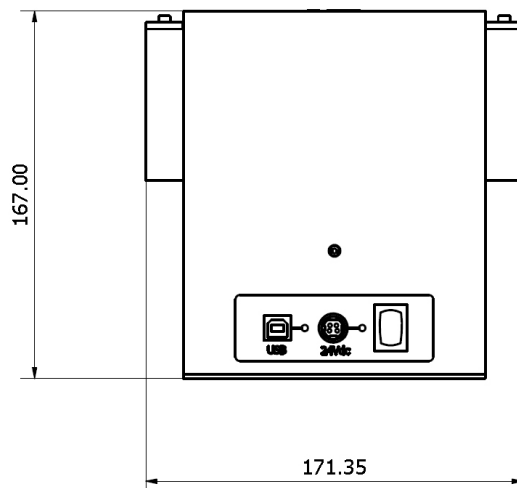
Top view



Side view



Front view



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