

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

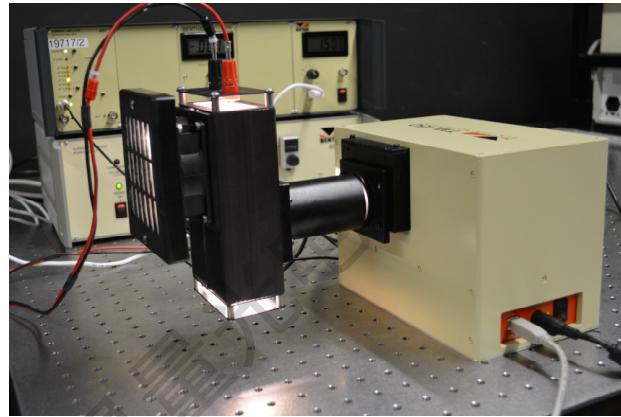
## TMc150 Monochromator

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

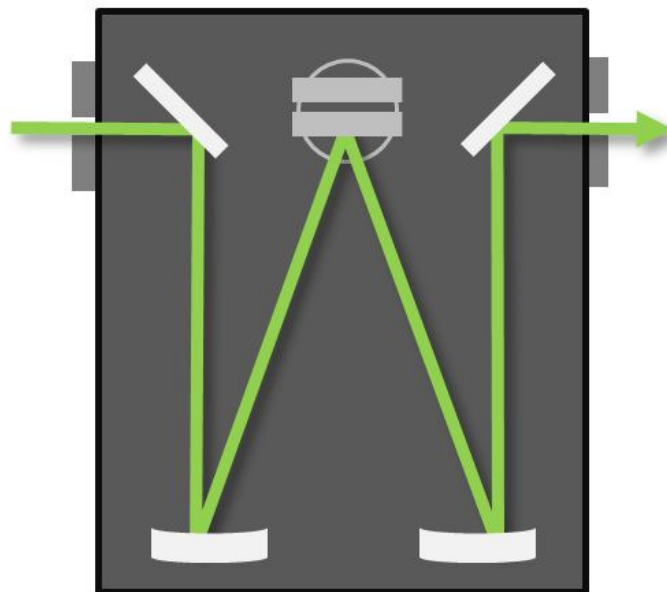
Compatible with the full range of sources, detectors and accessories of the Bentham portfolio, the TMc150 monochromator fits in the smallest of spaces in a measurement set-up and is well-suited to integration into an OEM system.

### 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 system
- Fully automated through USB 2.0 interface



## Configuration

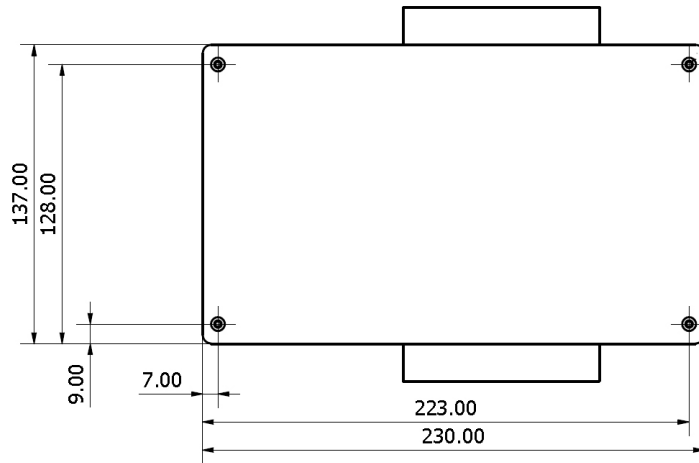


# Specification

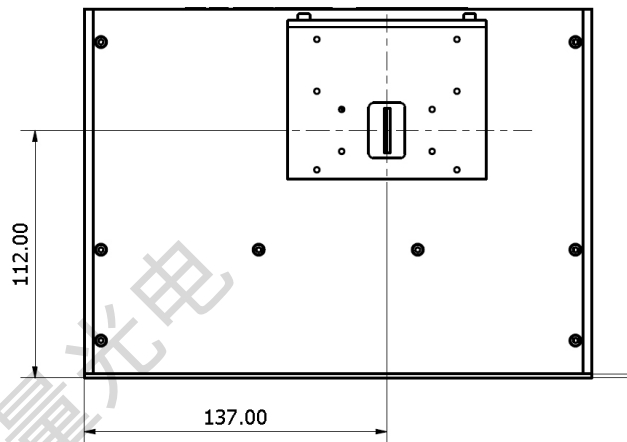
<b>Optical Layout</b>	
Configuration	Symmetrical Czerny Turner
Focal length	150mm
Grating mount	Dual grating turret
Number of gratings	1-2
Grating size	30 x 30mm
Aperture ratio	f/4.2
Number of entrance/ exit ports	1 entrance, 1 exit
<b>Opto-Mechanical</b>	
Mechanical resolution drive	0.000072°/ step
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)

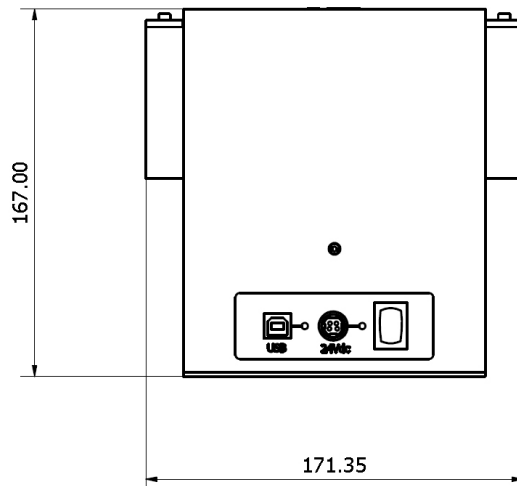
Top view



Side view



Front view



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