

BI-MwA Multi-Angle Light Scattering detector (MALS)

HK Series



Quickly, easily, and accurately determine absolute molecular weights of proteins and polymers. Eliminate SEC/GPC column calibration and improve data quality. Rapidly reduce uncertainty with no assumptions required and true extrapolation to zero angle. Best of all, the BI-MwA has the highest performance/price ratio of any light scattering detector used for molecular weight determination.

The BI-MwA Molecular Weight Analyser is simple to use. Inject your sample into the low-volume, 7-angle flow cell. The sample is illuminated by a temperature stabilized, precision power-controlled diode laser. The ultra-stable, high-sensitivity, low-noise CCD detector automatically collects the scattered light. Then, the software extrapolates the data to zero angle for the absolute molecular weight determination.

SPECIFICATIONS

Molecular Weight Range	<10 ³ to >10 ⁹ Daltons, depending on dn/dc and concentration. (High end for dendrimers and other compact structures.)
Angles	7, nominally 35, 50, 75, 90, 105, 130, and 145 degrees.
Fiber	Low numerical aperture, integral to cell.
Maximum Pressure	3.5 MPa (500 psi).
Volume	Cell, 100 µL nominal; Scattering, 20 nL nominal.
Laser	Temp. stabilized w/prec. power control, 35 mW, 635 nm, vertically polarized.
Cell	PEEK & Quartz, compatible to most SEC Eluents as Chloroform, HFIP, THF, DMF
Detector	CCD, ultra-high sensitivity and spatial uniformity.
Power Requirements	100/115/220/240 VAC, 50/60 Hz, 25 Watts
Dimensions	Size: 195(H) x 210(W) x 380(D) mm
Weight	5.5 Kg
Communication	USB, will connect to ParSEC and UniChrom Software Packages