

Key Specifications

Refeyn Two^{MP} Mass Photometer Specifications*

Mass range	30 kDa – 5 MDa
Resolution (FWHM)	25 kDa @ 66 kDa 60 kDa @ 660 kDa
Mass precision	± 2%
Mass error	± 5% (single measurement)
Concentration range	100 pM – 100 nM
Sensitivity:	<< 1 ng of protein
Wavelength:	488 nm
Field of view:	Small: 3 x 11 µm (@ 700 Hz) Regular: 4 x 11 µm (@ 500 Hz) Large: 12 x 17 µm (@ 135 Hz)
Pixel size:	12 nm

* All specifications subject to meeting the installation requirements

Instrument	What to measure to measure	Calibrant	MW (kDa) / Size (bp or bases)
Two ^{MP} One ^{MP}	Small Proteins <90KDa	BAM	56, 112, 224 kDa
	Medium Size 90KDa-1MDa	BAM +TG (separate)	56, 112, 224 + 670 kDa
		Urease	90, 272, 545 kDa
	Larger proteins >500kDa	BAM + TG (separate)	112, 224 + 670 kDa
		Urease + TG (separate)	272, 545 + 670 kDa
	dsDNA	Invitrogen DNA ladder	100, 200, 400, 800, 1200, 2000 bp
	ssDNA	M13MP18 + Phix174	7249 and 5386 bases
	RNA	Agilent ssRNA Ladder	200, 500, 1000, 1500, 2000 bp
NEB ssRNA Ladder		500, 1000, 2000, 3000 bases	
Samux ^{MP}	AAV	AAV empty + (0, 0)	3700 + 0,0 kDa
	ssDNA	M13MP18 + Phix174	7249 and 5386 bases

Beta-amylase, Sigma, ref: A8781
Tg: T9145
Urease: U7752