

Technical Data - Litesizer 500

Standard methods
ASTM D4001-13, ASTM E2490-09, ASTM E2865-12, ASTM D4001-13, ASTM E2490-09, ASTM E2865-12, ASTM D4001-13, ISO 13099-2, ISO 22412, USP 729

Technical Specifications:	
Temp. control range	0 °C–90 °C
Light source	Semiconductor laser / 40 mW, 658 nm
Laser warm-up time	6 min
Ambient operating temp.	10 °C–35 °C
Dimensions (W, D, H)	460 mm, 485 mm, 135 mm
Weight	approx. 18 kg (40 lb)
Particle size specifications:	
Measuring range	0.3 nm–10 µm (particle diameter)
Minimum sample volume	12 µL
Sensitivity:	
Min. concentration	0.1 mg/mL (lysozyme)
Max. concentration	50 %m/v (sample-dependent)
Accuracy	Better than +/- 2 % on NIST traceable standards
Repeatability	Better than +/- 2 % on NIST traceable standards
Measurement angles	15°, 90°, 175°
Zeta potential specifications:	
Measuring range	>= +/- 1000 mV
Mobility range	10 -11 m ² /V.s to 2 x 10 -7 m ² /V.s
Size range	3.8 nm–100 µm
Min. sample volume	50 µL (sample viscosity dependent)
Sensitivity	0.1 mg/mL (lysozyme)
Maximum sample concentration	70 %w/v
Accuracy	+/- 10 %
Repeatability	+/- 3 %
Maximum sample conductivity	200 mS/cm
Molecular mass specifications:	
Measuring range (mass)	980 Da–20 MDa
Measuring range (particle size)	up to 40 nm (diameter)
Lowest concentration limit	0.1 mg/mL (lysozyme)
Accuracy	+/-10 %
Repeatability	+/-5 %
Measurement angle	90°