

Litesizer™ 500

Light-Scattering Instrument for Particle Analysis



Instrument Specifications

Make and Model	Anton Paar, Litesizer™ 500
Light source	Laser light of wavelength 658 nm from a single frequency laser diode, providing 40 mW.
Laser warm-up time	6 min
Detection angles	15°, 90°, 175° (particle size) 15° (zeta potential) 90° (molecular mass)
Particle size range	0.3 nm – 10 µm (particle size) 3.8 nm – 100 µm (zeta potential) 980 Da – 20 MDa (molecular mass)
Minimum concentration	0.1 mg/mL (lysozyme) (particle size) 1 mg/mL (lysozyme) (zeta potential) 0.1 mg/mL (lysozyme) (molecular mass)
Temperature range	0–90 °C (32–194 °F)
Minimum volume	20 µL (particle size) 350 µL (zeta potential) 20 µL (molecular mass)

Features

This instrument is essential for the study of particle size, particle size distribution and surface charge such as zeta potential, isoelectric point, electrophoretic mobility of colloids, emulsion and submicron suspension. The value of zeta potential can be related to the stability of colloidal dispersions and it indicates the degree of repulsion between adjacent, similarly charged particles in a dispersion. Particle size and size distribution required to check the monodispersity of the nanoparticle sample. DLS and Zeta potential offers a wide range of particle sizes from 0.3 nm to 10 microns with different scattering angles for the small to large particle size and offers greater sensitivity and stability including turbid samples. Refractive index and transmittance can be measured.

Contact Us

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