

TECHNICAL SPECIFICATION FOR SIZE AND ZETA POTENTIAL ANALYSER

Parameters measured	Size, Zeta potential, Molecular weight, A2
Standard laser	4mW, 633nm
Temperature control range	0°C - 90°C +/- 0.1°C,
channels Correlator	25ns to 8000s, max 4000 channels
Size	
Range (Maximum diameter)	0.3nm - 10 microns*
Min sample volume	20µL
Min concentration, protein	10mg/mL 15kDa protein
Measurement angles (water as dispersant)	13° + 173°
Analysis algorithms	General purpose NNLS, multiple narrow modes, protein
Zeta potential	
Sensitivity	10mg/mL 66kDa protein
Zeta potential range	> +/-500mV
Mobility range	> +/- 20 µ.cm/V.s
Maximum sample concentration	40% w/v
Minimum sample volume (using diffusion barrier)	20µL
Maximum sample conductivity	200mS/cm
Signal processing	M3-PALS
Molecular weight	
Molecular weight range (estimated from DLS)	<1000Da - 2 x 10 ⁷ Da
Molecular weight range (Debye plot)	<10,000Da - 2 x 10 ⁷ Da

ACCESSORIES (OPTIONAL) TO BE QUOTED SEPARATELY	MPT2- Auto-Titrator Vibro Viscometer Universal Dip cell Surface zeta potential cell
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Qualification Criteria

- 1) The bidder should have an office and Service support centre in Tamil Nadu and should have a application laboratory facility in India to provide complete technical support, Proof of the same should be attached
- 2) The bidder should be representing the same brand in India minimum 10 years or more than that.
- 3) More user base and customer satisfaction proof will be Preferred.

- 4) Warranty Period: The minimum comprehensive warranty period must be TWO years from date of installation. Also, the comprehensive service agreement value for the following three years must be provided.
- 5) Operation and Service Manual: The operation and service manual of this equipment must be provided free-of- cost, along with the equipment.
- 6) Operation and Maintenance training: At the time of installation, a detailed operation and maintenance training must be carried out to our users in our lab.
- 7) Customer Application Support: The supplier must have a customer application support facility and trained person to design the correct methods for processing and analyzing various types of nano samples.
- 8) List of all consumable items with present cost required for routine sample analysis must be provided.
- 9) List, address and contact number of current user in South India must be provided for users feedback.
- 10) The necessary list of standards required for calibrating the instrument and verifying reproducibility in all Particle Size/ Zeta Potential range must be provided with cost.

