

**Specifications of Nano Particle Tracking Analyzer**

1. The Size Range -10 to 100 nm or better
2. The instrument should have capabilities to do the concentration measurements.
3. Temperature Range - 10° to 50° C
4. Sample Volume - 350 µL or less
5. The instrument should be capable to work with non-corrosive solvents and water.
6. The primary laser source should be Violet laser with minimum wavelength 405 nm or more.
7. The system should be capable to upgrade with Green Laser Violet laser (520nm), Blue laser (488 nm) and Red Laser (640nm) or more.
8. The instrument should be capable to take measurement in both fluorescence and scattering mode.
9. The system should have multfilter option with 5 different positions for fluorescence and 1 for scattering. Customizable to choose band pass/long pass filter.
10. The objective piece used in the instrument should be 20X or greater for better resolution.
11. Highly Sensitive CMOS Camera is installed in the instrument.
12. It should be compatible with auto sampler option in future; to perform high precision sample analysis with environmental changes (pH, Temp etc.).
13. Numerical aperture should be 0.4 or higher to capture maximum amount of scattered light. The instrument should be equipped with ports and software to connect syringe pumps.
14. Should be able to report Size Vs Concentration, Diffusion coefficient Vs Concentration, 3D-plot for size Vs Concentration Vs Intensity.
15. Syringe pump to perform sample analysis at a constant flow rate for fluorescence signal to be quoted in option.
16. A suitable computer to run and use the NTA software to get the result in the desired formats like CSV, PDF and video files as well.
17. Consumables for three years has to be quoted.
18. Services: Should have office and service team available within NCR / Delhi for supporting the system post sale.
19. Warranty & CMC: Three years standard warranty should be quoted. The vendor should also provide CMC for the next 2 years or more.
20. Training to be provided to 2 concerned staff and 2 students
21. The vendor should provide the list of at least 15 installations along with at least 05 satisfied user certificate.
22. The vendor should provide compliance statement to be provided point wise showing/highlighting items part as quoted in the quotation for comprehensive technical comparison
23. The prices should be quoted inclusive of all taxes except/ excise duty and FOR Jamia Hamdard basis. Jamia Hamdard will provide custom/excise exemption certificate

