## **Technical specifications for Particle Size Analyser**

Particle size analyser complete in all respects	
Measurement	Laser Diffraction using Mie and Franhoufer scattering theory
Samples	Dry powder, suspension, emulsion
Laser Power	2 mW or more Min. 2 lasers or more
Accuracy	≤ ± 1 %
Size range	Wet mode : 150 nm to 2500 μm (or a wider range ) Dry mode : 100 nm to 2500 μm (or a wider range )
Detector	Photo diode array
Sonication Power	40 W (or higher)
Mode of operation	Wet mode and Dry mode Should be supplied with systems for both wet mode and dry mode of operation

## **Other requirements**

**Laptop**: (Processor i7, windows 10 or better, memory 8 GB RAM, 1 TB HDD, 2 GB Graphic card, 11 inches – 13.5 inches, wide HD display screen, 3 hours battery life or better, should have suitable interface to connect to particle size analyser

Suitable software for system operation, equipment control, data analysis, data interpretation and report generation

Class I laser safety confirming to EN 60825-1:2001

**Reference materials:** The system must be supplied with reference materials meeting the requirements of ISO 13320:2009 with test certificate having traceability to National/International Standard

**Accessories:** All accessories required for cleaning and maintenance of the equipment such as vacuum cleaner, air compressor and dryer shall be supplied along with the equipment

The other mandatory accessories, spares and tools for the efficient operation of the machine shall be supplied with the equipment

The wet mode size analysis should have a wide range of chemical compatibility such as aqueous and organic dispersants

Onsite service and warranty of minimum two years