

Haze spectrometer system

1	System Requirements	
1.1	Parameters to measured	Haze as per ASTM D1003-00 standard and Transmittance, reflectance, and absorptance.
1.2	Configuration	The system shall have dual beam, dual sample compartment and dual monochromator with 150 mm integrating sphere.
2	Wavelength	
2.1	Range	200 - 2500 nm or better
2.2	Accuracy	± 0.5 nm (UV-Visible) or better ± 3.0 nm (Near IR) or better
3	Photometric	
3.1	Measurement Range	0.0001 % (Optical density 6) or better (UV-VIS) 0.001 % (Optical density 5) or better (Near IR)
3.2	Accuracy	< 0.005 NIST filter 0.5 A
4	Haze/ Transmittance/ Reflectance	
4.1	Measurement Range	0-100%
4.2	Resolution	0.01
5	Sample Compartment	
		Sample compartment shall accommodate samples from 25 mm to 250 mm diameter.
6	Detector	
		150 mm diameter integrating sphere with PMT and PbS detectors
7	Data acquisition system	
		Windows based data acquisition system with latest operating system (Windows 10 or better with 8 GB RAM, 1TB SSD). Software shall have data acquisition modes for haze, spectral luminous transmittance, diffuse transmittance, diffused reflectance, absorbance, and color value. MS Office with license shall be provided.
8	Standards	
		Calibrated white reflection standard shall be provided. Quantity: 01
9	Essential Spares	
		Source: 01 No, Liquid sample holder with quartz cuvette: 01 No and Polarizer: 01 No
10	Acceptance criteria	
		Vendor shall show the specified performance of the spectrometer system as per Sl. No. 2 to 4 and demonstrate haze measurement at LEOS with standards and LEOS provided samples.
11	Warranty	
		Two-years on entire system including consumables
12	Electrical Power	
		230 ± 20 V AC, 50 Hz, Single phase
13	Documents	
		User manual-soft copy
14	Deliverables	
		Haze spectrometer system – 01 No, Essential spares-01 Set
15	Delivery period	
		Within 6 months from Purchase Order

General requirement

1. It is **Two-part tender. Disclosing the price in technical bid will disqualify the vendor.** Price shall be quoted separately in price bid (for optional items as well).
2. It is mandatory for the bidders to provide One-to-one compliance statement along with supporting document (example catalog/ published articles) for all the specifications, failing which bidders will be technically disqualified.