Technical Specifications of UV-Visible Spectrophotometer

S. No.	Description	Technical Details
1.	Photometric System	Double beam optics
2.	Wavelength Range	190 to 900 nm or better
3.	Wavelength Accuracy	+/- 0.3 nm or better
4.	Wavelength Repeatability	+/- 0.05 nm or better
5.	Photometric range	> 3.5 Abs or better
6.	Photometric repeatability	+/- 0.005 Abs (0.5 Abs & 1.0 Abs)
7.	Spectral Bandwidth	Variable (1nm and 2nm) or better. System with application focused beam geometry (AFBG) will be preferred for wide range of sample types.
8.	Resolution	0.1 nm or better
9.	Wavelength Scan Speed	Up to 4000 nm/min or better
10.	Noise level	0.0003 Abs RMS (500nm) or better
11.	Stray light	< 0.03% at 220 nm, 300/340 nm/ 370 nm or lesser
12.	Monochromator	Monochromator
13.	Detector	Photomultiplier/ Silicon Photodiode or as per system requirement.
14.	Light source	Tungsten and Deuterium/ Xenon lamp with automatic switching or Suitable as per system requirement.
15.	Quartz Cuvette	3 ml capacity 10 mm path length (01 pair)
16.	Peltier accessories	Peltier accessory (0-100 Deg C) for both reference and sample along with controlling software & temperature probe to conduct temperature ramping experiments.
17.	Software	Original licensed Windows 10 based Operating software in the form of CD ROM With GLP/GMP compliant should have built in features like real time concentration display, Time scan, Photometric mode Single/multi- wavelength, Enzyme Kinetics calculation, event recording such as Addition of reagents During measurement, DNA/protein quantification etc. Validation Software should be supplied with instrument to check/verify the parameters like Stray Light, Resolution, Noise Level, Drift, Baseline flatness etc. or Parameters as per vendor IQOQ requirement.
18.	Installation and Training	Installation and Training to be provided at installation site.
19.	Documents	IQ/OQ to be performed during installation and documents to be provided by the supplier/manufacturer.
20.	Warranty	Two Years on entire system and 3 years warranty on lamp or one set of source should be quoted.
21.	Accessories	OEM PC OR One Branded PC i7 of 10th Generation or better, 500GB SSD & 1TB HDD or better with at least 8GB RAM, original windows 10/11 and 22" or more Display, Keyboard Mouse & One Laser B/w Printer, UPS (3 KVA).
22.	Important Note:	Note: Vendor should clearly mention make and model, also enclose Catalogue/Data sheet of the Model quoted in support of the above mentioned Specifications otherwise their bids will be rejected.

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