

Annexure-A

Tender Specification UV-Vis Detector: Double beam UV-Vis detector with colour touch screen display and stylus pen. Low stray light, ultra fast scan function. Photometric, spectrum, quantitation, kinetics, time scan, biomethod mode.

Light source	WI lamp/D2 lamp
Wavelength range	190 to 1,100nm
Wavelength accuracy	±0.1nm(656.1nm) ; ±0.3nm(at all wavelengths)
Wavelength repeatability	±0.1nm
Spectral bandwidth (SBW)	1.0nm(190 to 1,100nm)
Stray light	Less than 0.5%(198nm KCl) ; Less than 0.02%(220nm NaI) ; Less than 0.02%(340nm NaNO ₂)
Photometric range	Absorbance: -4 to 4Abs ; Transmittance: 0 to 400%
Photometric accuracy	±0.002Abs(0.5Abs) ; ±0.004Abs(1.0Abs) ; ±0.006Abs(2.0Abs) (NIST930D/NIST1930 or equivalent)
Photometric repeatability	Less than ±0.0002Abs at 0.5Abs ; Less than ±0.0002 Abs at 1.0Abs; Less than ±0.0010Abs at 2.0Abs
Scan speed	3,000 to 2 nm/min and 29,000 nm/min when survey scanning
Wavelength slew rate	Approx. 14,500nm/min
RMS noise	Less than 0.00005Abs (700nm)
Baseline stability	Less than 0.0003Abs/hr (700 nm, one hour after light source turned ON)
Baseline flatness	Less than ±0.0006Abs (1,100 to 190 nm, one hour after light source turned ON)
Cuvette	Quartz cuvette approx. 3.5 ml with 10 mm pathlength- 01 Nos. Quartz cuvette approx.400 ul with 10 mm pathlength cell – 01Nos.
Softwarefeatures	Spectrophotometer should have built-in hardware validation for Wavelength accuracy, wavelengthrepeatability, resolution, stray light, photometricaccuracy, photometric repeatability, baseline flatness, baseline stability, noise level and validation software along with optical filter for wavelength calibration. Windows based Operating software should have builtin features like real time concentration display, Photometric mode Single / multi-wavelength, Enzyme Kinetics calculation, event recordings such as Addition of reagents during measurement, DNA/protein quantification etc. System must be fully upgradable to 21CFR part 11 compliance, compliance to USP 857 and client server network.
PC, Printer and UPS requirement	1. Compatible PC HP/Dell 21 inch monitor, i5 processor, 8 GB RAM, 1 TB HDD, Window 10, Original Antivirus, online ups of PC. 2. Laser Jet Printer – B/W 3. Online UPS 2 KVA with 30 min backup
Warranty	2 year warranty on the system.

Tender Specification for UV-Visible Detector Accessories (Filtration Assembly & Vacuum Pump)

S. No	Description	Qty
1.	All Glass Filtration Assembly with 47mm disc, 250 ml cup & 1000ml Flask Borosilicate Glass	1
2.	Vacuum Pump ¼ H.P. with vacuum gauge and moisture trap Rocker Type	1

Tender Specifications for Ultrapure Water Purification System

Internal reservoir	7L capacity for type II water
UV lamp	Emission at 185 and 254 nm wavelength
Final filter options	0.22 micron
Ultrapure (Type I) Flow Rate (L/min)	0.01 – 1.2
Ultrapure Resistivity (MΩ-cm at 25°C)	18.2
Microorganisms (cfu/10mL) with Micro filter	<0.1
Particulates <0.22µm (/mL) with Micro filter	<1
Endotoxin/ Pyrogen (EU/ml) with Bio Filter	<0.001
RNase /DNase	<1pg/ml & <5 pg/ml
Pure Water Type II Make up rate of RO (L/hr.)	10
Resistivity (MΩ-cm at 25°C)	>1 Mega Ohm-cm
TOC (Total Organic Carbon)	< 50ppb
Bacterial Count	< 100 cfu/ml