

Technical Specification UV-Vis Spectrophotometer :

- The machine should be double beam UV-Vis spectrophotometer
- It should have color touch screen display and include stylus pen for easy operation.
- It should have low stray light and ultra-fast scan function.
- It should have Photometric, spectrum, quantitation, kinetics, time scan, biometric mode.
- It should include the following specifications.

Description	Specification
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.
Software features	Spectrophotometer should have built in hardware validation for Wavelength accuracy, wavelength repeatability, resolution, stray light, photometric accuracy, photometric repeatability, baseline flatness, baseline stability, noise level and validation software along with optical filter for wavelength calibration. Windows based Operating software should have built in features like real time concentration display, Photometric mode Single / multi- wavelength, Enzyme Kinetics calculation, event recording 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, i3 processor, 8 GB RAM, 500 GB HDD, Window 10, Original Antivirus. 2. Online UPS 2 KVA with 30 min backup
Warranty	Minimum 1 year warranty on the system.

