UV-VIS SPECTROPHOTOMETER

Specifications:

- Optical System: Double Beam
- Wavelength range: 190 to 900 nm or better
- Spectral band pass: should be selectable 0.5, 1.0, 1.5, 2.0, 4.0 nm
- Stray light: 0.05% or less
- Wavelength accuracy: +/- 0.3nm
- Wavelength repeatability: < 0.1nm
- Photometric output range: >3 Abs
- Wavelength scan speed: 1- 3800 nm/min variable
- Data Intervals of 0.05 - 10 nm
- Baseline stability: 0.0005 Abs (at 500nm, 2hours after power on)
- Noise level:+/- 0.00015 Abs (at 500nm)
- Baseline flatness:+/- 0.0006 Abs (within 200 to 950 nm)
- Xenon lamp or Halogen and D_2
- Should have LCD display
- Peltier-controlled cell holder for accurate temperature control is essential.
- A stirrer for samples in cuvettes would be desirable
- Should be compatible with low volume quartz and disposable UV transmitting cuvettes.
- The system should be perfectly suitable for nucleic acid, protein assays, enzyme kinetics as well as for cell culture density measurements.
- Data output via USB to a PC for printing and storage.
- Operating Voltage: 230 ±10 VAC, 50Hz

Software functions:

- Measurement mode: photometry, wavelength scan, time scan, multiple wavelength Ratio (260/280)
- Working curve type linear quadratic, polygonal line, K factor input.
- Calculation of correlation coefficient, Concentration unit input, Kinetic assay, Spectrum display, Spectrum and working curve printout
- Peak/valley detection Tracing, Scale expansion/Contraction
- Smoothing, Differentiation, Area calculation
- Fundamental arithmetic calculations between spectra
- Automatic wavelength calibration

Other requirements

- Comprehensive warranty for minimum three years with 2 more years free AMC
- Compatible UPS should be supplied
- A recent model branded PC should be supplied