

### **UV-Vis Spectrophotometer with Integrating Sphere**

Optical Design: Double Beam with sample and reference cuvette positions; Czerny-Turner Monochromator

Spectral Bandwidths: Variable: 1 nm and 2 nm; Room Light Resistant Microcell, Fiber optic, Material Optimised

Light Source: Xenon flash lamp or similar with atleast 3-year warranty

Detector: Dual Silicon Photodiodes

Wavelength Range: 190 –1100 nm

Wavelength Accuracy:  $\pm 0.5$  nm (541.9, 546.1 nm mercury line)  $\pm 0.8$  nm (full range)

Wavelength Reproducibility:  $\leq 0.05$  nm (546.1 nm mercury line, SD of 10 measurements)

Scanning Speed:  $<1$  to 5000 nm/min or better ; continuously variable

Slew Speed: 25,000nm/min or better

Photometric Range  $\geq 3.5$  Abs

#### **Should Include:**

- a. Integrating Sphere for Thin Film Analysis with following specification
  - ~ 60mm Integrating Sphere w/Spectralon coating
  - ~ Single beam
  - ~ Transmittance and reflectance modes
  - ~ includes 1A mesh filter
- b. Software for Computer Control and off-line data analysis
- c. USB Memory Device
- d. A pair of Quartz cuvettes with 10 mm path length and 3.5 ml volume
- e. Free of cost Installation and demonstration at site
- f. Full Range Scanning