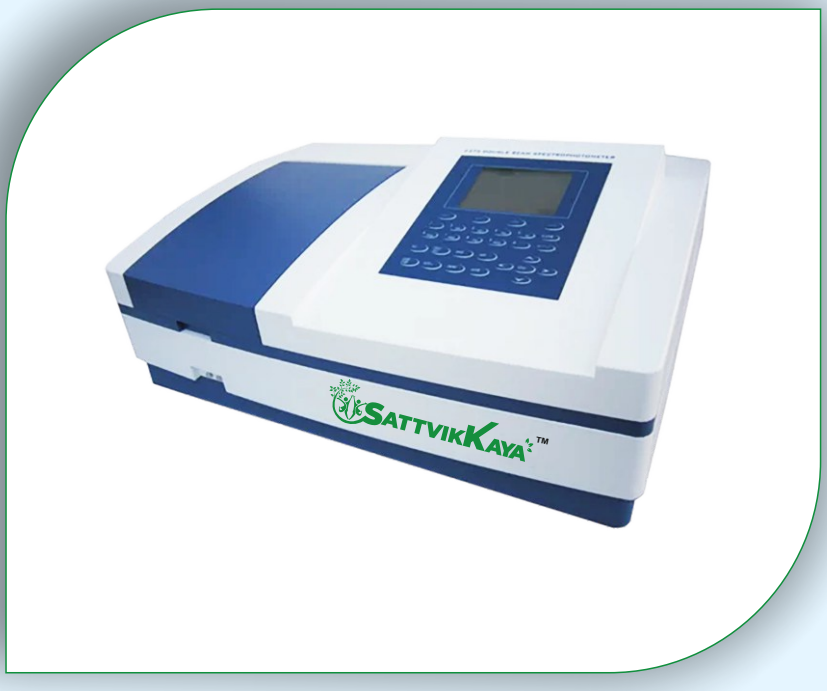
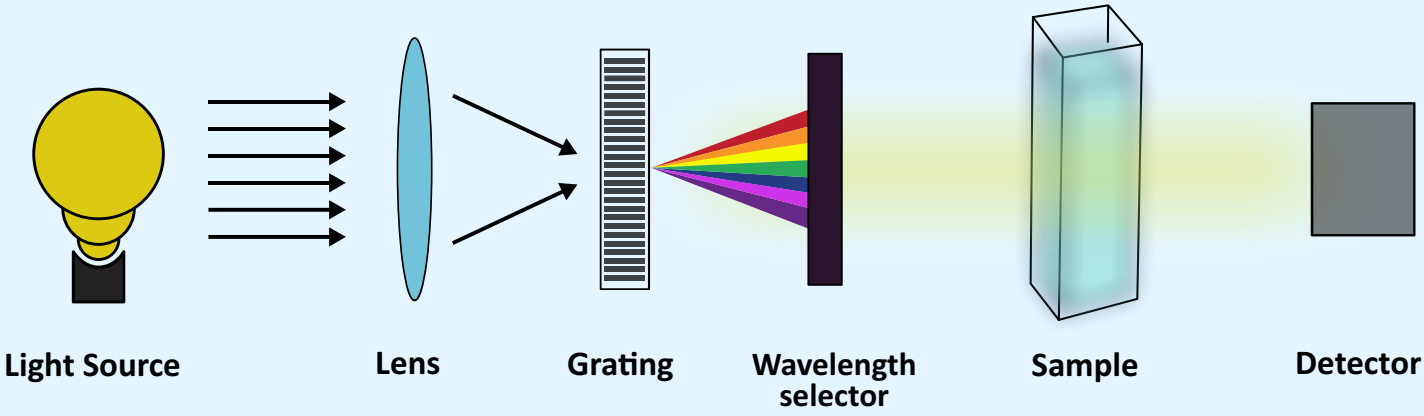
SATTVIKKAYA™

UV VIS Double Beam Spectrophotometer SK-LE09-ISR





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Technical Specification

Model	UV-VIS Double Beam Spectrophotometer SK-LE09-ISR
Monochromator	Lo-Ray-Light blazed based holographic grating Czerny Turner mounting
Wavelength Range	185 to 1450 nm (measurement full region), 185 to 900 nm (custom), 185 nm to 1450 nm (with ISR)
Photometric Accuracy	±0.002A(0.5A), ±0.003A(1A), ±0.005A(at2A) ±0.01A(60mg/LPDC), ±0.01A(430nm, 600mg/LPDC)
Wavelength Accuracy	±0.1nm(656.1nm D2), ±0.3nm(all range)
Wavelength Repeatability, Absorbance	≤0.1nm(all range), ± 5A
Spectral Bandwidth	0.1/0.2/0.5/1.0/2.0/5.0/20.0 nm bandwidth variable
Wavelength Resolution	0.1 nm
Wavelength Settings	Auto, Resolution 0.1nm
Photometric Range	-5 to +5 Abs
Wavelength Reproducibility	≤0.05nm (6 measurement sat 656.1nm, SD) ≤0.1nm(all range)
Photometric Repeatability	<0.0001 A (at 0.5 A) <0.0001 A (at 1 A) <0.0003 A (at 2 A)
Photometric Mode	Absorbance, Energy (E), Transmittance (%) and Reflectance (%) 0-100000 with upgradation
Photometric accuracy	At 1A, ± 0.003A
Stray Light	<0.5% (198nm KCl), <0.01% (220nm NaCl, <0.01% 340nm, 370nm NaNO2), <1.0% (300nm, Acetone)
Stability	±0.001A/h (500nm, 0A)
Scanning Speed	~5.0 to 15,000 nm/min
Baseline Flatness	±0.0005A
Wavelength sampling pitch	0.01 nm sampling of solid, liquid, thin film of polymer, DRS measurement
PC Software	Window Software, real time recording
Interface	USB Port , Parallel Port connecters RS-232
Power	AC 220V/ 50Hz
Net Weight	26 -28 kg
Accessories	Quartz Cell Cuvette ~01 cm, Complete Software Package, 3.0 USB cable, Operation Manual, integrated Sphere 50-100 mm with upgradability and Powder sample holder cup 0.16 ml/0.30 ml

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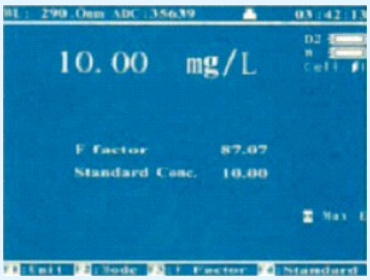
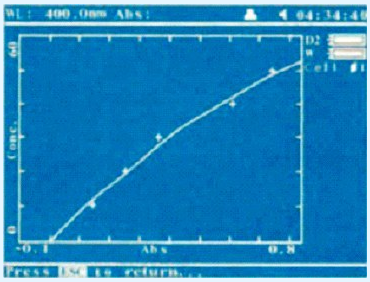


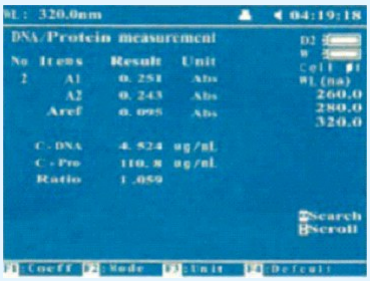
Basic Mode

To measure the Absorbance and transmittance



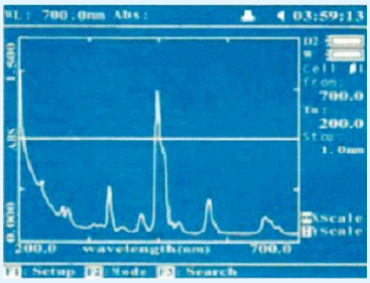
Quantitative

1. Coefficient Method
2. Standard Curve Up to 10 Standard sample may be used to establish a curve. Four methods for fitting a curve through the calibration points: Linear fit. Linear fit through zero, Square fit and cubic fit.



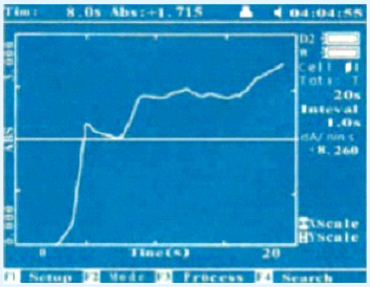
DNA/Protein Test

Concentration and DNA purity are quickly and easily calculated: Absorbance rations: 260 nm/280 nm with optional subtracted absorbance at 320 nm. DNA concentration 62.9XA260-36.0XA280 Protein concentration = 1552xA260-757.3xA 280



Wavelenght Scan

1. High, Medium and low scan speed are available.
2. Wavelength are scanned from high to low so that the instrument waits at high WL. And it minimizes the degradation of UV sensitive samples.



Kinetics

Abs vs time graphs is displayed on the screen in real time wait time and measurement time up to 12 hours may be entered with time interval of 0.5,1,2,5,10,30 seconds and one min. Post-run manipulation includes re-scalling, curve tracking and selection of the part of the curve required for rate calculation. Rate is calculated using a linear regression algorithm before multiplying be the entered factor.

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Display (Graphic LCD 320x240 Dots

Soft touch keypad

SALIENT FEATURES

- Double beam optical system
- Low noise and Low stray light
- Large LCD display, can display curve
- High quality grating, detector and lamps
- Data and Curve can be stored in real-time
- Auto setting WL, auto Blank
- Lamps can be turned on/off individually
- Easy to change Pri-aligned lamps
- Reinforced baseboard and bracket assures durability

STANDARD CONFIGURATION

Glass Cell	: 4 Nos.
Quartz cells	: 2 Nos.
Software CD	: 1 No.
USB Cable	: 1 No.
Operational Manual	: 1 No.
Software Manual	: 1 No.
Software key	: 1 No.

FUNCTION

- Photometric: T%, Abs , reflectance mode
- Quantitative: Standard Curve
- System Utility
- WL Scan (Spectrum Scan)
- Time Scan (Kinetics)
- DNA/Protein Test

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