

Order Code - 58008



DOUBLE BEAM UV-VIS Spectrophotometer optical system. Double beam optical structure can inhibit the drift, Suitable for long time test. with 0.5/1/1.5/2/4/5nm Variable bandwidth, They are suitable for search, biochemical and pharmaceutical lab applications.

SALIENT FEATURES :

- Double beam ensure low drift, low noise and Low stray light
- High speed MCU, high precision AD, large storage capacity
- Large LCD display (320x240 Dots)
- 1.0nm or variable Bandwidth meet Pharmacopoeia
- Data and Curve can be stored in real-time
- Online software upgrade capability
- Lamps can be turned on/off individually
- Easy to change Pri-aligned lamps

FUNCTION:

- Photometric
- Quantitative(Standard Curve)
- WL Scan(Spectrum Scan)
- Time Scan(Kinetics)
- DNA/Protein Test
- Multi-WL Test
- System Utility

ACCESSORIES

- Control Unit.
- Cell holder with Peltier System. (It's already pre-loaded into the compartment of the spectrophotometer).
- Control Cable (to connect the Control Unit with the Cell holder with Peltier System).
- Peristaltic pump pipe. (It's already pre-loaded into the pump valve of the Control Unit)
- Power cord.

STANDARD CONFIGURATION

- Glass Cells : 4No.
- Quartz Cell : 2Nos.
- Instrument Cover : 1No.
- Software CD : 1No.
- USB Cable : 1No.
- Operational Manual : 1No.
- Software Manual : 1No.
- Software Key : 1No.

TECHNICAL SPECIFICATION

- The valid temperature range is from 15°C to 65°C
- The valid sampling time range is from 30s to 10min,
- The valid peristaltic pump speed range is from 1 to 12
- The sampling speed is about 50ml/min.
- Power supply is 220±22V@50±1Hz or 110±11V@60±1Hz.

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
 Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
 Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
 Website: www.tescaglobal.com



TECHNICAL SPECIFICATION

Wavelength Range	:	190-1100nm
Spectral Bandwidth	:	0.5/1/1.5/2/4/5nm Variable
Optical System	:	Double Beam, Blazed Holographic Grating (1200 lines/mm)
Wavelength Accuracy	:	±0.5nm
Wavelength Repeatability	:	≤0.2nm
Wavelength Setting	:	Auto, Resolution 0.1nm
Photometric Range	:	0~200%T,-4~4A,0~9999C
Photometric Accuracy	:	±0.002 A (0~0.5A), ±0.003A (0.5~1A), ±0.3%T (0~100%T)
Photometric Repeatability	:	≤0.001 A (0~0.5A), ≤0.002A (0.5~1A), ≤0.2%T (0~100%T)
Stray Light	:	≤0.05%T(220/360nm)
Scan Speed	:	High, Medium, Low. Max.2000nm/minute
Baseline Flatness	:	±0.001A/h (500nm,0A)
Stability	:	10mm Pathlength Cuvette
Noise	:	≤0.2%T/3min (250/500nm,0%T); ≤0.3%T/3min (250/500nm,100%T)
Sample Compartment	:	10mm Pathlength Cuvette
Detector	:	Silicon Photodiode
Lamps	:	Tungsten Lamp & Deuterium Lamp (Pre-aligned)
Display	:	Graphic LCD (320*240 Dots)
Keypad	:	30-key Alphanumeric Membrane Keypad
Output Port	:	USB Port
Printer	:	Mini Serial Printer; PC Printer
PC Software	:	PC Scanning Software
Power Requirements	:	AC 90-250V, 50/60Hz
Dimension	:	635x515x255mm
Weight	:	26kg

Note: Specifications are subject to change.

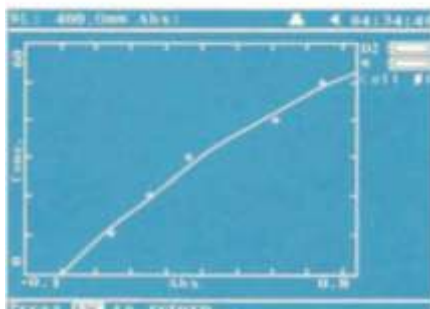
Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tescaglobal.com



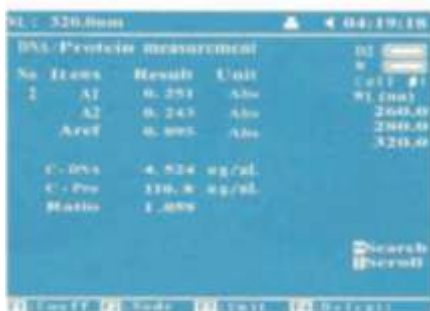
Basic Mode :

To measure the Absorbance and transmittance



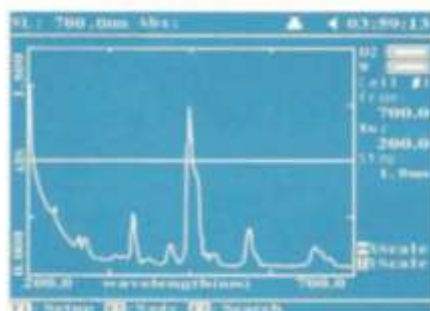
Quantitative :

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.



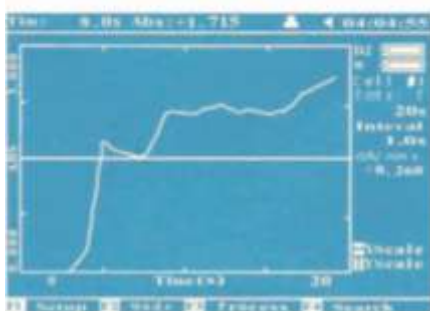
DNA/Protein Test :

Concentration and DNA purity are quickly and easily calculated: Absorbance ratios: 260 nm / 280 nm with optional subtracted absorbance at 320 nm. DNA concentration = $62.9 \times A_{260} - 36.0 \times A_{280}$
 Protein concentration = $1552 \times A_{260} - 757.3 \times A_{280}$



Wavelength Scan :

1. The wavelength scan intervals are 0.1,0.2,0.5,1,2,5 nm
2. High, Medium and low scan speed are available. They vary from 100 to 3600 nm/min
3. 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-scaling, curve tracking and selection of the part of the curve required for rate calculation. Rate is calculated using a linear regression algorithm before multiplying by the entered factor.

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
 Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
 Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
 Website: www.tescaglobal.com

