Order Code - 58005

Double Beam UV/VIS Spectrophotometer

Spectrophotometer are advanced double beam optical system . Double be am optical structure can inhibit the drift, Suitable for long time t e s t. with 0.5/1/1.5/2/4/5nm Variable bandwidth, They are suitable for search ,biochemical and pharmaceutical la b 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

Display (Graphic LCD 320 x 240 Dots)

Soft touch keypad

STANDARD CONFIGURATION

- Glass Cell : 4 Nos.
- Quartz cells : 2 Nos.
- Instruments Cover : 1 No.
- Software CD : 1 N o.
- USB Cable : 1 N o.
- Operational Manual : 1 N o .
- Software Manual : 1 N o .
- Software key : 1 N o.

FUNCTION:

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

Note: Specifications are subject to change.

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Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
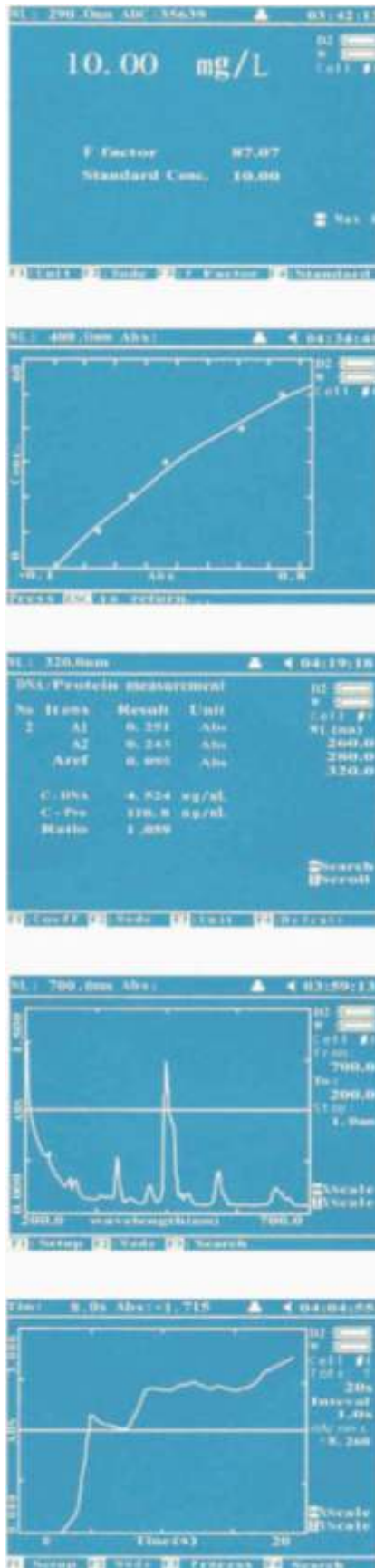Website: www.tescaglobal.com

TECHNICAL SPECIFICATION

Optical System	:	Double Beam, Grating 1200 lines/mm
Wavelength Range	:	190nm - 1100nm
Spectral Bandwidth	:	1nm
Wavelength Accuracy	:	<=+/0.1nni (656.1nmD2),<=+/0.3nm(full wavelength Range)
Wavelength Repeatability	:	0.1nm
Photometric Accuracy	:	±0.3%T(0-100%T)
Photometric Repeatability	:	0.001Abs(0-0.5Abs)
Photometric Range	:	-3A-3A
Stray Light	:	<=0.02%T(220nm,nal,340nm NaMO2)
Stability	:	±0.0004 A/H@500nm
Baseline Flatness	:	±0.001A
Noise	:	0.0003 A/H
Scanning Speed	:	Fast, Mid, Slow
Wavelength Setting	:	AUTO
Keyboard	:	Membrane Keypad
Light Source	:	Deuterium & Tungsten Lamp
Wavelength Resolution	:	0.1nm
Photometric Mode	:	A,T,C
Detector	:	Imported Silicon Photodiode
Interface	:	USB Portandparallelport (Printer)
Power	:	AC 220V/50Hz or AC 110V/60Hz
Dimension	:	590x460x220mm
Weight	:	25kg
Drift	:	<=+/0.0004A bs/h
Cell Holder	:	8 Cell Holder

Note: Specifications are subject to change.

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 = $62.9 \times A260 - 36.0 \times A280$
Protein concentration = $1552 \times A260 - 757.3 \times A280$

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 be the entered factor.

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