

Microprocessor UV-VIS Double Beam Spectrophotometer DSB-2704



Product Features

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

*Design & specification are subject to change without any prior notice. *

Function

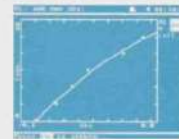
- Photometric: T%, Abs
- Quantitative: Standard Curve
- System Utility
- WL Scan (Spectrum Scan)
- Time Scan (Kinetics)
- DNA/Protein Test

Model	DSB-2704
Wavelength Range	190-1100nm
Spectral Bandwidth	1nm
Optical System	Double Beam, Blazed Holographic Grating (1200 lines/mm)
Wavelength Accuracy	±0.5nm
Wavelength Repeatability	50.2nm
Wavelength Setting	Auto, Resolution 0.1 nm
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	50.001 A (0-0.5A), 50.002A (0.5-1A), 50.2%T (0-100%T)
Stray Light	50.05%T(220/360nm)
Scan Speed	High, Medium, Low. Max.2000nm/minute
Baseline Flatness	±0.0015A
Stability	±0.001A/h (500nm,0A)
Noise	50.2%T/3min (250/500nm,0%T); 50.5%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	UV Analyst Scanning Software
Power Requirements	AC90-250V, 50/60Hz
Dimension	545x468x245
Weight	18kg



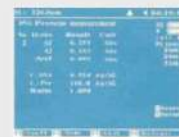
BASIC MODE

To measure the Absorbance and transmittance



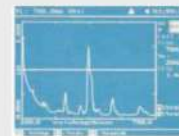
QUANTITATIVE

- Coefficient Method
- 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 through zero, Square and cubic fit.



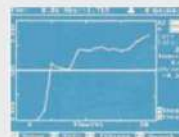
DNA/PROTEIN TEST

Concentration and DNA purity are quickly and easily calculated: Absorbance ratios: 260 nm/ 280 nm with optional subtracted absorbance at 320 nm. DNA concentration = 62.9XA260-36.DXA280 Protein concentration = 1552xA260-757.3xA 280



WAVELENGTH SCAN

- The wavelength scan intervals are 0.1,0.2,0.5,1,2,5 nm
- High, Medium and low scan speed are available. They vary from 100 to 3600 nm/min
- 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

APPLICATIONS

- Medicine/Pharmaceutical Industry
- Environment Monitoring
- Commodity Inspection
- Food Inspection
- Agricultural Chemistry
- Teaching in Colleges & Universities
- Metallurgy
- Geology
- Machine Manufacturing
- Petrochemical Industries
- Water and Waste water Labs
- Food and beverages Labs



STANDARD CONFIGURATION

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