



## Application

- \* 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

## 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

## Function

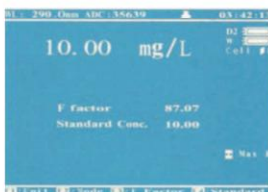
Photometric : T% Abs  
 Quantitative : Standard Curve  
 System Utility  
 WL Scan (Spectrum Scan)  
 Time Scan (Kinetics)  
 DNA/ Protein Test

## STANDARD CONFIGURATION

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

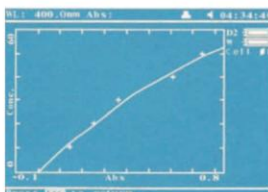
**TECHNICAL SPECIFICATION**

Wavelength Range	190-1100nm
Spectral Bandwidth	1nm
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	±0.002A (0~0.5A), ±0.003A(0.5~1A), ±0.3% T(0~100%T)
Photometric Repeatability	<-0.001A (0~0.5A), <- 0.002A(0.5~1A), <-0.2%T (0~100%T)
Stary Light	<-0.05%T (220/360nm)
Scan Speed	High,Medium,Low Max 2000nm/minute
Baseline Flatness	±0.0015A
Stability	±0.001A/h (500nm,0A)
Noise	<-0.2% T/3min (250/500nm,0%T):<-0.5% T/3min (250/500nm,100T)
Sample Compartment	10mm Partlength Cuvette
Detector	Silicon Photodiode
Lamps	Tungsten Lamp & Deuterium Lamp(Pre-aligned)
Display	Graphic LED (320*240 Dots)
Keypad	30-key Alphanumeric Membrane Keypad
Output Port	USB Port
Printer	Mini Serial Printer: PC Printer
PC Software	Optional PC scanning software
Power Requiwements	AC 90-250V, 50/60 Hz
Dimension	54.5x468x245mm
Weight	18kg



**Basic Mode**

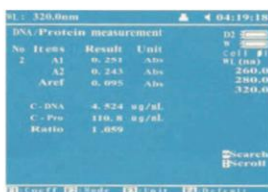
To measure the Absorbance and transmittance



**Quantitative**

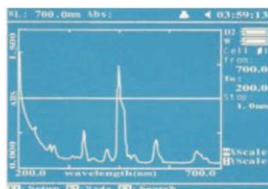
1. Coefficient Method

2. Standarf 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.



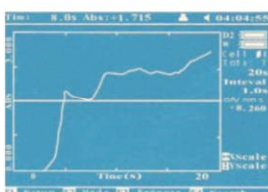
**DNA/Protein Test**

Concentration and DNA purity are quickly and easily calculated: Absorbance rations : 260nm / 280nm with optional subtracted absorbance at 320nm. DNA concentration = 62.9X260-36.0XA280 Protein concentration = 1552xA260-757.3xA 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 sample.



**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 calculates using a linear regression algorithm before multiplying be the entered factor