Order Code - 58002

Display (Graphic LCD 320 x 240 Dots)

Soft touch keypad

Double Beam UV/VIS Spectrophotometer

Spectrophotometer is double beam optical system can restrain drift, compensates for blank changes, Suitable for long time test. It is simple to fit a curve by using your standard with single or dual W L. It have wavelength scanning function using PC software. It is widely used in colleges and QC 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 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.

Note: Specifications are subject to change.

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	:	±0.002 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	:	±0.0015A
Stability	:	±0.001A/h (500nm,0A)
Noise	:	≤0.2%T/3min (250/500nm,0%T); ≤0.5%T/3min (250/500nm,100%T)
Sample Compartment	:	10mm Pathlength Cuvette
Detector	:	Silicon Photodiode
Lamps	:	Tungsten Lamp & Deuterium Lamp (Pre-aligned)
Display	:	Graphic LCD (32*240 Dots)
Keypad	:	30-key Alphanumeric Membrance Keypad
Output Port	:	USB Port
Printer	:	Mini Serial Printer; PC Printer
PC Software	:	UV Analyst Scanning Software
Power Requirements	:	AC 90-250V, 50/60Hz
Dimension	:	545x468x245mm
Weight	:	18 kg

Note: Specifications are subject to change.
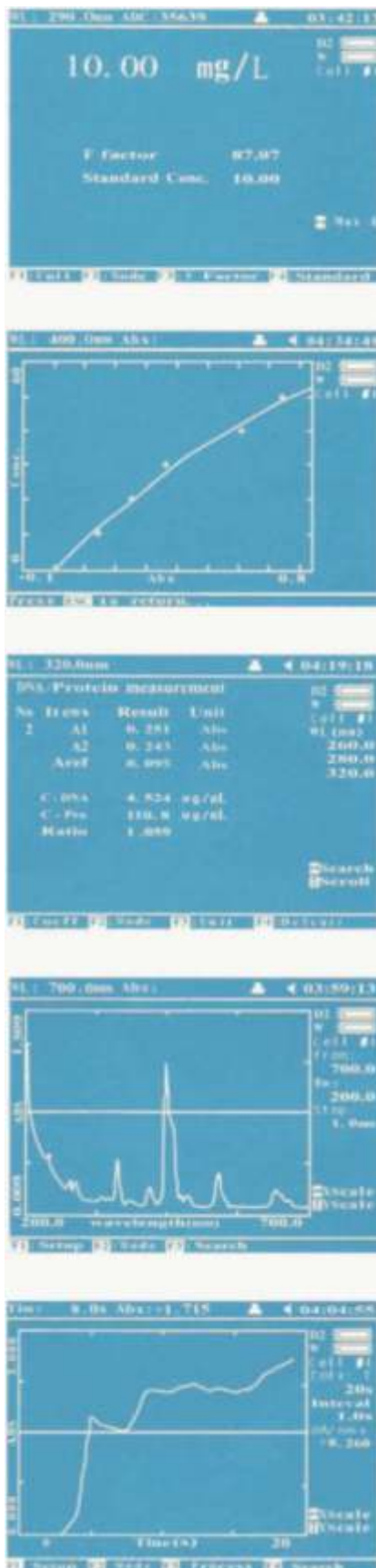
Basic Mode :

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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