Microprocessor UV- VIS Double Beam Spectrophotometer
Brand- Biogenix®

PRODUCT DESCRIPTION

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

Basic Features

- Double beam optical system
- Low noise and Low stray light
- Large LCD display

- High quality granting , 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 pre-aligned lamps
- Reinforced base board and bracket assures durability.

Technical Specification

Model	BDS- 2704
Wavelength Range	190-1100 nm
Wavelength Accuracy	±0.1 nm(D2 656.1NM),±0.3 nm full range
Wavelength Repeatability	≤0.1 nm
Spectral Bandwidth	1 nm
Photometric Range	0-200%T, 4˜4A, 0-9999C
Photometric Accuracy	±0.2T (0-100%T)
Photometric Repeatability	≤0.05 %T(0-100%T); ±0.001Abs (0-0.5Abs); ±0.002Abs (0.5-1.0Abs);
Stability	±0.001A/h at 500 nm
Baseline Flatness	0.002A (200-1000nm)
Stray Light	0.05 %T 220 / 360mm
Lamps	Tungsten Lamp Deuterium
Detector	Silicon photodiode
PC Software	Optional PC scanning software
Gross Dimension (W/D/H)	590x460x220nm
Display	Graphic LCD (320*240 dots)
Noise	±0.0004 A
Weight (Net/Gross)	25KG
Power Supply	AC 90-220V/50/60Hz
Output Port	USB Port
Printer	Min Serial Printer ,PC printer
Keypad	30- key Alphanumeric Membranes keypad
Sample Compartment	10mm Photodiode
Scan Speed	High, medium, low. Max 2000nm/min
Cell holder	2 nos.

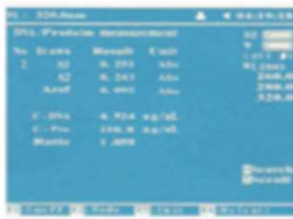# UV-Vis spectroscopy analysis

Basic mode
To measure the absorbance and transmittance
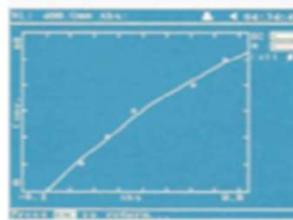
Quantitative
Standard curve up to 10 standard sample may be used to establish a curve . Four methods for fitting a curve through the calibration points. Linear fit through zero , Square fit and cubic fit.

DNA/Protein test
Concentration and DNA Purity are quickly and easily calculated: Absorbance rations: 260nm/280nm with optional Subtracted absorbance at 320nm.DNA concentration $= 62.9 \times A260 \sim 36.0 \times A280$ protein Concentration $1552 \times A260 \sim 757.3 \times A280$
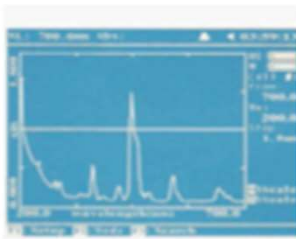
Wavelength scan
Wavelength is scanned from high to low so that the instruments waits at high WL. And it minimize the degradation of UV sensitive sample
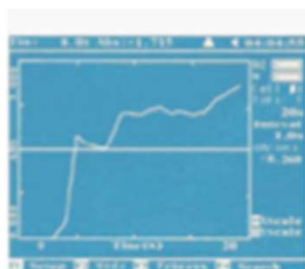
Kinetics
Click Abs vs. Time (under the Set Collection Mode). Click on Treat Contiguous Wavelengths as a Single Range. The wavelength of maximum absorbance will be automatically selected.

Function:
- Photometric : T%, Abs
- Quantitative : standard curve
- System Utility
- WL Scan (kinetics)
- DNA/Protein test

# Using a USB Adapter to Connect your Spectrophotometer to PC

Easy to Operate

USB Connection

Some spectrophotometers, designed a USB sockets, which allows the users to connect the spectrophotometer to a computer. Or one can insert an USB stick to export measurement result. By connecting the spectrophotometer to a computer, on can control the spectrometer via the software. And one can do some powerful functions in the software, such as finding the peaks, Fourier transform, and proceed some basic spectrum analysis in the software

➥A USB flash drive could be plugged into the front of the instrument, but none of my drives are recognized by the spectrophotometer.

➥The PC could be connected as an external printer, but I haven't found a way to receive the data without Biogenix software.

➥The PC could be connected as an external printer, but set the instrument to believe it is a PCL format printer. Could the data be intercepted and converted to a usable form.
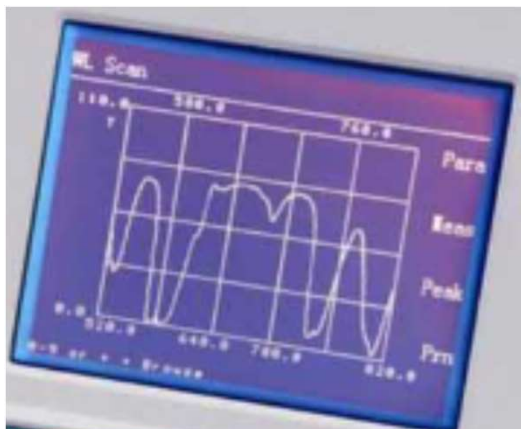
Display (Graphic LCD 320*240 Dots)

Soft Touch Keypad

Strengths and limitations of UV-Vis spectroscopy

▪The technique is **non-destructive**, allowing the sample to be reused or proceed to further processing or analyses.

▪Measurements can be made **quickly**, allowing easy integration into experimental protocols.

▪Instruments are **easy to use**, requiring little user training prior to use.

▪Data analysis generally requires **minimal processing**, again meaning little user training is required.

▪The instrument is generally **inexpensive** to acquire and operate, making it accessible for many laboratories.

Standard Configuration	
Glass Cell	4 Nos.
Quartz cells	2 Nos.
Instruments cover	1 Nos.
Software CD	1 Nos.
Operational Manual	1 Nos.
Software manual	1 Nos.
Software Key	1 Nos.

Applications

❖ Medicine/Pharmaceutical Industry
❖ Environment Monitoring
❖ Commodity Inspection
❖ Food Inspection
❖ Agricultural Chemistry
❖ Teaching in colleges & Universities
❖ Metallurgy
❖ Geology
❖ Machine Manufacturing
❖ Petrochemical Industries
❖ Water and wastewater Labs
❖ Food and beverages Labs

Dealer Details

BioGenix®

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