

Double Beam UV-VIS Spectrophotometer

ZI 14034



Double Beam UV-VIS Spectrophotometer : ZI 14034

It is compact and easy to operate instrument for spectrophotometric analysis of a solution of any concentration. The output is available on 24x2 line LCD display in terms of %Transmission (%T), Absorbance(Abs.) & Concentration (Conc.). This instrument has 1000 sample storage memory, printer output for printing of data with any dot matrix printer. RS-232C interface for computer can be provided on request. The use of micro-controller has made it an extremely versatile and state-of-the-art instrument. Facility for using 19mm path length cuvette is provided. The instrument operates at wavelength between 190-1100 nm. The use of diffraction grating in the monochromator produces a linear spectrum. The use of grating having very high resolution of 1200 lines/mm ensures a narrow bandwidth. Deuterium lamp (D2) is used in the range 190-380nm and Tungsten Halogen lamp (W) in the range 380-1100nm.

FEATURES :

- Double beam optics
- Scanning UV-VIS spectrophotometer
- 2 line 24 character dot matrix backlit LCD display
- Microprocessor based with printer interface
- Optional PC compatibility with RS232 interface
- Programmable lamp change over wavelength
- Automatic wavelength calibration
- Compact, modular and economical
- Automatic 6 position cuvette holder for 10mm pathlength cuvettes
- Fully automatic, user friendly and menu driven software
- Self check and self diagnostic features
- Data saving and retrieval facility

SPECIFICATIONS

Spectral

Range	190-1100 nm
Bandwidth	2 nm
Accuracy	± 0.5 nm
Readability	0.1nm
Repeatability	±0.2nm

Photometric

System	Double beam optics
Range	Abs : 0 to ±3.000, %T : 0 to 100.0%
Accuracy	± 0.005 Abs at 1.0 Abs, ± 0.010 Abs at 1.5 Abs
Repeatability	0.002 Abs at 1.5Abs
Stray Light	<0.1%T at 260 nm with KI 10g/l
Readability	% T : 0.1, Abs : 0.001
Light Source	Deuterium (D2) & Tungsten (W) Halogen Lamps
Monochromator	Czerny - Turner type with 1200 lines per mm
Detector	Wide range highly sensitive photodiode

Operational

Baseline Correction	Automatic baseline correction
Measuring Mode	Scan (Absorbance & Transmission), Photometric (Multi λ & Serial λ) Concentration & Time Scan (Kinetics)
Scan Speed	Slow, Medium & Fast
Scan Interval	5-99 seconds
Sample Holder	Automatic 6-position cuvette holder for 10 mm pathlength cuvettes
Filters	Auto, in-built filter wheel
Data Storage	1000 samples storage memory

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