

Microprocessor UV-VIS Spectrophotometer

ZI 14028



Microprocessor UV-VIS Spectrophotometer : ZI 14028

It is single beam and easy to operate instrument for Spectrophotometric analysis of a solution of any concentration. The output is available on 16x2 line LCD display in terms of % Transmission (%T), Absorbance (Abs), Concentration (Conc), and K Factor. This instrument has 100 sample storage memory, printer output for printing of data with any dot matrix printer. RS-232 interface for computer can be provided on request. The use of microcontroller has made it extremely versatile and state-of-the art instrument. 10mm path length cuvettes facility is provided. The instrument operates at wave length between 190 to 1000nm range. Diffraction grating of 1200 lines/mm in the monochromator produces a linear spectrum. An automatic shutter is provided to stop the light increases the life of photodiode tremendously. Deuterium lamp (D2) is used in the range 190 to 350nm and Tungston Halogen lamp(W) cover 350 to 1000nm.

FEATURES :

Printer Interface

Covers 190 to 1000nm

4 Position Cuvette Holder

16x2 Line LCD data display

4 Digit Wavelength Display

RS-232C Computer Interface

SPECIFICATIONS

Spectral

Wavelength Accuracy	190 to 1000 nm
Spectral Bandwidth	2nm
Accuracy	± 0.5 nm

Repeatability	± 0.3 nm
Read Out (Wavelength)	4 digit 7 segment LED, Resolution : 0.1 nm
Photometric	
Photometric Range	% T : 0 to 1000%. Abs. : 0 to 1.999, Conc. : 0 to 19999 K Factor : 0 to 19999
Accuracy	± 0.005 Abs at 1.0 Abs, ± 0.010 Abs at 1.5 abs
Stray Light	Less than 0.1% at 230 nm
Readability	± 1 count
Data Readout	16 x 2 Line LCD back lit display
Keyboard	8 keys, soft touch membrane type
Data Storage	upto 1000 samples (0-99)
Interface	Printer interface for any centronics dot matrix printer
Serial Interface	RS 232C interface (Optional)
Light Source	a) Tungston Halogen Lamp, b) Deuterium Lamp (D2)
Detector	Wide range silicon photodiode
Optics	Complete mirror optics with resolution 1200 grooves/mm grating, Czerny turner mount
Sample Holder	4 position adjustable sample holder
Power	230V $\pm 10\%$ 50 Hz AC
Dimensions	(LxBxH) (550x405x130)mm
Weight	25 kg. (approx.)

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