



SPECIFICATIONS

SPECTRAL

Range	190 to 1100 nm
Bandwidth	2 nm
Readability	0.1 nm
Accuracy	± 0.3 nm
Repeatability	± 0.2 nm

LIGHT SOURCE

Deuterium Lamp (D.) & Tungsten (W) Halogen Lamp

DETECTOR

Silicon Photo Diode

PHOTOMETRIC

Range	± 2.500 Abs	
Accuracy	± 0.005 Abs at 1.0 Abs ± 0.010 Abs at 1.5 Abs	
Repeatability	± 0.003 Abs at 1.0 Abs	
Stability (Baseline)	± 0.003 Abs/hr, after 2 hour warm up	
Stray Light	<1% T at 200 nm with KCl 12g/L <1% T at 220 nm with NaI 10g/L	
Readability	%T	0.01
	Abs	0.0001

MONOCHROMATOR

Czerny - Turner type with 1200 lines/mm Holographic Diffraction Grating

CONTROL

Standalone	Microprocessor & Micro controller
Optional	Through Computer

PC CONNECTIVITY

USB Interface

DATA PRESENTATION

Display	4 line 20 Character Dot Matrix Backlit LCD Module
Hard Copy	On Printer (Centronics)

DATA PROCESSING

Standalone	Spectrum, Discrete Wavelength, Concentration, ϵ - Factor, Time Scan, Auto Zero and Printing,
PC Mode	Spectrum, Discrete Wavelength, Concentration, ϵ - Factor, Time Scan, Enzyme Kinetics, Overlay, Ratiometric, Peak Picking, Upto 4 th order Derivative, Spectra Zooming, Smoothing, Data Saving & Retrieving, Auto Zero facility and Printing

POWER REQUIREMENT

90-260 V AC, 50-60 Hz, 1 ϕ , 170 VA Max.

SAMPLE ATTACHMENT

Standard	Motorised 6 position Cuvette holder for 10 mm Path Length Cuvettes.
Optional	Motorised 2 position multi path Length Cuvette holder for 10, 20, 40 & 50 mm Path Length Cuvettes.

ACCESSORIES SUPPLIED

With Instrument	10 mm Path length Cuvettes - 2 nos
At extra Cost	Multi Path length Cuvette holder, 10 mm, 20 mm, 40 mm, 50 mm and 100 mm Path length Cuvettes, Micro Cuvettes, PC, Spectratreats Software and Printer

PHYSICAL DIMENSIONS

Size (WxDxH) in mm	520 x 395 x 180
Weight (in kg)	Approx. 17

Scanning UV-Visible Spectrophotometer.
Microprocessor based with Printer Interface.

SALIENT FEATURES

- Fully Automatic, user friendly and menu driven.
- Automatic Wavelength Calibration, Selection of Wavelength and Positioning of the sample holder.
- Programmable Wavelength for Lamp change over.
- Automatic 6 position cuvette holder for 10 mm path length cuvettes.
- Lamp selection enables conserving the life of the lamps.
- Stand-alone unit offers an advanced technology with data processing features for Scanning, Discrete Wavelength, Concentration determination by standards and ϵ -factor method, Time scan with minimum time interval of 1.0 sec, Auto-zero facility, self-check and self-diagnostic modes.
- Data in the form of graph and table can be printed directly on to a printer.
- Compact, Modular & Ergonomically designed.

SOFTWARE FEATURES

- Optional Multi-Tasking user friendly PC Software provides the Analysis to run all the features available in Standalone Unit and additionally has techniques to view, analyses and display up to 4th order derivative Spectra, overlay of maximum ten Spectra, Peak Picking Facilities, % Concentration mode, Auto Zero Facility, Spectra Zooming, Smoothing, Data Saving, Retrieval, Interpretation of Data and Printing.
- Software is 21 CFR Part 11 compliant with password method protection, Instrument logbook etc. cGLP compliance addressed.

APPLICATIONS

- For any Spectrophotometric or Colorimetric measurement where applications require very high-resolution bandwidth and cGLP compliance is mandatory.
- Enzyme Kinetics.
- Micronutrients like N, P, K, S, Ca, Mg, Zn, Cu, B, Mo, etc., in Agricultural soil, Plants etc.
- Organic compounds in biological matter.
- Glucose, Fructose, Carbohydrates, Protein etc., in Foods.
- Edible Dyes, Alcohols etc., in Beverages.
- Purity of constituents in Pharmaceuticals.
- Toxic elements like Cadmium, Lead, Arsenic and Mercury etc., in Effluents.
- Constituents in compositions used in Metallurgy, Fertilizer, Pesticide, Chemical, Petrochemical, Steel, Cement, Glass & Other Industries.
- Life Science Applications.