

SL 342

PRODUCT SPECIFICATION SHEET

Spectrophotometer



Double Beam UV-VIS
Spectrophotometer

SL 342



Double Beam



Touchscreen



Cuvette



PC

7" High Resolution Touch Screen LCD Color Graphical Display with Built in PC .

Supports USB-Pen Drive to Store/Retrieve Mass Spectral Data.

Smallest form factor Double Beam Spectrophotometer.

SALIENT FEATURES

- Built in Windows® Based PC Control.
- Measuring Modes - % Transmittance (%T), Absorbance (Abs), Concentration (CONC) by K-factor and Multi Standards.
- Stand alone unit offers an advanced technology with data processing features for Scanning, Discrete Wavelength, Concentration determination by standards and ϵ -factor method, k-factor, multi standards, 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.
- Built in advanced Data Processing capabilities like 4th order Derivate Spectra, Overlay of maximum ten Spectra, Peak Picking Facilities, % Concentration mode, Auto Zero Facility, Spectra Zooming, Smoothing, Data Saving, Retrieval and Printing.
- Supports USB printing with PCL 5e class printers.
- Networking Connectivity through TCP/IP Interface.

OPTIONAL

- Variable Bandwidth with incremental steps of 0.5 nm
- Automatic wavelength calibration and programmable wavelength for lamp change over.
- Lamp selection enables conserving the life of the lamps.

PC SOFTWARE FEATURES

- Software is 21 GLP Part 11 compliant with password method protection, Instrument logbook etc. cCFR compliance addressed.



Chemical



Agriculture



Pharmaceutical



MicroNutrients



Soil



Pesticide



Academic



Metals



Fertilizer



Cement



Dyes



Food & Beverages



Glass



Mines & Geology

APPLICATIONS

- For any Spectrophotometric or Colorimetric measurement where applications require very high-resolution bandwidth and cGLP compliance is mandatory.
- Enzyme Kinetics.
- Organic compounds in Biological matter.
- Glucose, Fructose, Carbohydrates, Proteins 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.
- Micronutrients like N, P, K, S, Ca, Mg, Zn, Cu, B, Mo, etc., in Agricultural soil, Plants etc.
- Life Science Applications.

SPECIFICATIONS

SPECTRAL

Selectable Wavelength Range	190 to 1100 nm (or) 340 to 1100 nm
Selectable Bandwidth	1 nm (or) <2 nm
Readability/Resolution	0.1 nm
Accuracy	± 0.3 nm
Repeatability	± 0.2 nm

PHOTOMETRIC

System	Double beam optics	
Range	± 4 Abs	
Accuracy	± 0.005 Abs at 1.0 Abs	
	± 0.010 Abs at 1.5 Abs	
Repeatability	± 0.002 Abs at 1.0 Abs	
Stability (Baseline)	± 0.003 Abs/hr. after 2 hour warm up	
Stray Light*	<0.05% T at 220 nm with NaI 10g/L	
Readability	%T	0.01
	Abs	0.0001

MONOCHROMATOR

Czerny Turner with Concave holographic grating (1200 lines/mm)

CONTROL

Built-in Windows Based PC Control

PORTS

3 USB Ports - Can be used for Printer, Keyboard, Pen Drive and Mouse

TCP/IP Ethernet, WiFi

PC Port - PC Connectivity

LIGHT SOURCE

Deuterium Lamp (D₂)* & Tungsten (W) Halogen Lamp

DETECTOR

Silicon Photo Diode or PMT

STORAGE

128 GB

DATA PRESENTATION

Display	7" (800 x 480) High resolution graphical display
Hard Copy	On Printer (USB interface)
Soft Copy	Mass Data Storage through USB Pen Drive

PHYSICAL DIMENSIONS

Size (WxDxH) in mm	500 x 375 x 230
Weight (in kg)	Approx. 15

POWER REQUIREMENT

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

SAMPLE ATTACHMENT

Standard	Fixed 10mm path length Holders for Reference and Sample.
Optional	Fixed multi path cuvette holders for Reference and Sample accommodating 10mm to 100 mm cuvettes.
	Fixed cuvette holder for Reference and 6 Position motorized 10 mm path cell holder for Sample.
	Fixed cuvette holder to accommodate micro cuvettes.

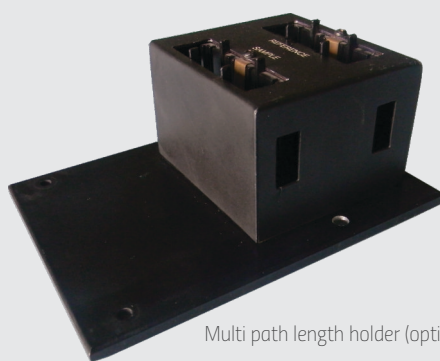
ACCESSORIES SUPPLIED

With Instrument	10 mm Path length Cuvettes, Built-in UV-VIS Spectratreats® Software
At extra Cost	Multi Path length Cuvette holder, 10 mm, 20 mm, 40 mm, 50 mm and 100 mm Path length Cuvettes, Micro Cuvettes, USB Pen Drive and Printer

* Applicable for wavelength range 190 to 1100 nm



Single cuvette holder (standard)



Multi path length holder (optional)



6 cuvettes holder (optional)

Celebrating 60 years
of our Journey



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