





Double Beam UV-Vis Spectrophotometer

PRODUCT SPECIFICATION SHEET





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

- Automatic wavelength calibration and programmable wavelength for lamp change over.
- Lamp selection enables conserving the life of the lamps.
- Built in Windows® Based PC Control.
- 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.
- 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.

SOFTWARE FEATURES

 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.
- 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

Range	190 to 1100 nm
Bandwidth	1.8 nm
Readability	0.1 nm
Accuracy	± 0.5 nm
Repeatability	± 0.2 nm

LIGHT SOURCE

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

DETECTOR Silicon Photo Diode

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

DATA PROCESSING

Spectrum, Concentration, Concentration by ϵ -Factor, Enzyme Kinetics, Overlay, Time Scan, Discrete Wavelength, Ratiometric, Peak Picking, Spectra Zooming, Smoothing, Data Saving & Retrieval, Auto Zero facility and Printing.

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, 1φ, 170 VA Max.



PHOTOMETRIC

System	Double beam optics	
Range	± 3 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 Nal 10g/L	
Readability	%Т	0.01
	Abs	0.0001

MONOCHROMATOR

Concave holographic grating with 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 Port - Network Connectivity

PC Port - PC Connectivity

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 100mm 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	10 mm Path length Cuvettes, Built
Instrument	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



Multi path length holder (optional)

6 cuvettes holder (optional)

Celebrating 60 years of our Journey



www.elico.co/60years



www.elico.co



B-90, A.P.I.E., Sanathnagar, Hyderabad 500 018, Telangana., India Tel +91 40 44451234 Fax +91 40 23771639 info@elico.co

Ahmedabad ahm@elico.co +91 98241 75321 Bengaluru blr@elico.co +91 99000 28741

Bhopal

bpl@elico.co +91 99930 96876

Bhubaneswar bbr@elico.co +91 99371 12105

Chennai chn@elico.co +91 98402 65797

Cochin kel@elico.co +91 81291 84400

Delhi del@elico.co +91 98710 06104

Guwahati gau@elico.co +91 91211 77451

© 2020 ELICO

hyd@elico.co +91 99896 25457 Kolkata kol@elico.co +91 91211 77452

Lucknow lku@elico.co +91 91980 01666 Mumbai mum@elico.co +91 77100 96111 Patna pat@elico.co +91 91211 77450

Visakhapatnam vtz@elico.co +91 99899 94532