

**DIODE ARRAY UV-VIS
SPECTROPHOTOMETER**

SA 165

PRODUCT SPECIFICATION SHEET



Diode Array UV-VIS
Spectrophotometer

SA 165



Fast Scan



Touchscreen



Cuvette



PC

Diode array based Spectrophotometer.

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

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



Chemical



Research



Life Sciences



Metals



Pharmaceutical



Food &
Beverages



Clinical



Pharmaceutical



MicroNutrients



Fertilizer



Academic

SALIENT FEATURES

- ▷ Fast Scan Speed.
- ▷ High signal to noise ratio.
- ▷ More rugged (Minimal moving parts)
- ▷ Smallest form factor Spectrophotometer.
- ▷ Lamp selection enables conserving the life of the lamps.
- ▷ Built in Windows® Based PC Control.
- ▷ 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 and Retrieval and exporting of Spectral Data as a CSV File.
- ▷ Supports USB printing with PCL 5e class Printer.
- ▷ Networking Connectivity through TCP/IP Interface.

SOFTWARE FEATURES

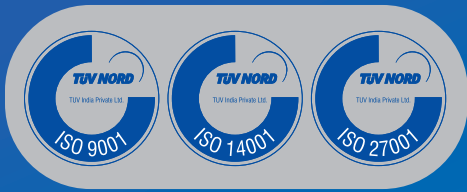
- ▷ Software is 21 CFR Part 11 compliant with password method protection, Instrument logbook etc. cGLP compliance addressed.

APPLICATIONS

- ▷ Fast spectral acquisition makes the first choice for measurement of fast chemical reactions and denaturing materials.
- ▷ 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.
- ▷ Life Science Applications.
- ▷ Determin pK, complexion constants and the constant uniformity of tablets containing two drugs.

SPECIFICATIONS

SPECTRAL		LIGHT SOURCE	
Range	190 to 800 nm	Pre aligned Deuterium Lamp (D ₂) & Tungsten (W) Halogen Lamp	
Bandwidth	< 2 nm	DETECTOR	
Accuracy	± 0.5 nm with Holmium Oxide glass Filter	Diode Array Detector - 1024 pixels	
	± 0.5 nm with 486.1 and 656.2 nm of D ₂ peaks	CONTROL	
Wavelength Resolution	< 0.62 nm per pixel	Built-in Windows Based PC Control	
Resolution Test	>1.4nm	PORTS	
PHOTOMETRIC		3 USB Ports - Can be used for Printer, Keyboard, Pen Drive and Mouse	
Range	± 2 Abs	TCP/IP Port - Network Connectivity	
Accuracy	± 0.01 AU with 60 ppm Potassium Dichromate	PC Port - PC Connectivity	
	± 0.005 AU at 440, 590nm with 0.5 AU of neutral density glass filter	SAMPLE ATTACHMENT	
	± 0.01 AU at 440, 590nm with 1.0 AU of neutral density glass filter	Standard	
Stability (Baseline)	0.005 AU after 15 minutes warm-up	2 position motorized cell holder to accommodate 10 mm Path Length Cuvettes.	
Stay light	<1% T @ 220 nm with NaI	Optional	
	<1% T @ 340 nm with NaNO ₂	2 position motorized cell holder to accommodate multi Path Length Cuvettes.	
DATA PRESENTATION		Fibre Optic Dip probe attachment.	
Display	7" (800 x 480) High resolution graphical display	Fibre Optic couple 10mm Path Length cell holder.	
Hard Copy	On printer (USB interface)	PHYSICAL DIMENSIONS	
Soft Copy	Mass Data Storage through USB Pen Drive	Size (WxDxH) in mm	330 x 310 x 260
DATA PROCESSING		Weight (in kg)	Approx. 11
Spectrum, Concentration, Overlay, Time Scan, Discrete Wavelength, Upto 4 th order Derivative, Peak Picking, Spectra Zooming, Smoothing, Averaging, Comparison, Data Saving & Retrieval, Auto Zero facility and Printing.		POWER REQUIREMENT	
ACCESSORIES SUPPLIED		90-260 V AC, 50-60 Hz, 1ϕ, 150 VA Max.	
With Instrument	10 mm Path length Cuvettes, Built in UV VIS Spectratreats [®] Software.		
At extra Cost	Multi Path length Cuvette holder for 10 mm, 20 mm, 40 mm and 50 mm Path Length Cuvettes, Transmission Dip Probe, Fibre Optic coupled Cuvette holder, USB Pen Drive, PC, PC Software and Printer.		



© 2013 ELICO

ELICO, the ELICO Monogram, Connecting Science & Lab and all other trademarks, Spectratreats, AquaSpec, Elichrom, and other service marks, unless otherwise noted, are owned or licensed by ELICO Ltd.

All other brand names, product names or trademarks belong to their respective holders.

Copyright © 2013, ELICO Ltd. All rights reserved.

PRINTED IN INDIA (05/13)

Specifications are subject to change as a process of continual development.

ELICO[®]
Connecting Science & Lab

ELICO Ltd

B-90, A.P.I.E., Sanathnagar,
Hyderabad 500 018, A.P., India

tel +91 40 44451234

fax +91 40 23771639

elico@elico.co

For further information and details on our business, products, operations and innovation, please visit our corporate website www.elico.co

Feedback or Queries related to the product can be sent to us at support@elico.co

See our other products at www.elico.co/products



Ahmedabad Bengaluru Bhopal Chennai Cochin Delhi Guwahati Hyderabad Kolkata Lucknow Mumbai

ahm@elico.co blr@elico.co bpl@elico.co chn@elico.co kel@elico.co del@elico.co gau@elico.co hyd@elico.co kol@elico.co lku@elico.co mum@elico.co
+91 79 26565402 +91 80 23343470 +91 755 2460817 +91 44 28361949 +91 484 2536380 +91 11 23678736 +91 9433065156 +91 40 23777999 +91 33 32971135 +91 9971092539 +91 22 24110402