

SA 165

PRODUCT SPECIFICATION SHEET

Diode Array UV-Vis Spectrophotometer



⚠ Please avoid using sharp objects on the touch screen.
⚠ Clean the touch screen with soft dry cloth.
⚠ Do not subject the touch screen to mechanical shock or to excessive force on its surface.
⚠ To avoid contamination on the touch screen surface, do not operate the touch panel with chemicals, grease and dirt.

ELICO
SA 165
Diode Array Spectrophotometer

Diode Array UV-Vis Spectrophotometer

SA 165



Fast Scan



Touch Screen



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.

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.



Chemical



Research



Life Sciences



Metals



Pharmaceutical



Food & Beverages



Clinical



Pharmaceutical



MicroNutrients



Fertilizer



Academic

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.
- Determine pK, complexion constants and the constant uniformity of tablets containing two drugs.

SPECIFICATIONS

SPECTRAL

Range	190 to 800 nm
Bandwidth	< 2 nm
Accuracy	± 0.5 nm with Holmium Oxide glass Filter ± 0.5 nm with 486.1 and 656.2 nm of D ₂ peaks
Wavelength Resolution	< 0.62 nm per pixel
Resolution Test	>1.4nm

PHOTOMETRIC

Range	± 2 Abs
Accuracy	± 0.01 AU with 60 ppm Potassium Dichromate ± 0.005 AU at 440, 590nm with 0.5 AU of neutral density glass filter ± 0.01 AU at 440, 590nm with 1.0 AU of neutral density glass filter
Stability (Baseline)	0.005 AU after 15 minutes warm-up
Stay light	<1% T @ 220 nm with NaI <1% T @ 340 nm with NaNO ₂

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, Overlay, Time Scan, Discrete Wavelength, Upto 4th order Derivative, Peak Picking, Spectra Zooming, Smoothing, Averaging, Comparison, Data Saving & Retrieval, Auto Zero facility and Printing.

ACCESSORIES SUPPLIED

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.

LIGHT SOURCE

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

DETECTOR

Diode Array Detector - 1024 pixels

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	2 position motorized cell holder to accommodate 10 mm Path Length Cuvettes.
Optional	2 position motorized cell holder to accommodate multi Path Length Cuvettes. Fibre Optic Dip probe attachment. Fibre Optic couple 10mm Path Length cell holder.

PHYSICAL DIMENSIONS

Size (WxDxH) in mm	330 x 310 x 260
Weight (in kg)	Approx. 11

POWER REQUIREMENT

90-260 V AC, 50-60 Hz, 1φ, 150 VA Max.

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of our Journey



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