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



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

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AQUASPEC

SL 270

PRODUCT SPECIFICATION SHEET

Dedicated Spectrophotometer for Water Analysis



AquaSpec

SL 270



Double Beam Touchscreen Multi Path Length Cuvettes & Round Vials PC

Smallest form factor Double Beam Spectrophotometer with spectral Bandwidth of <2nm.

Pre-Defined Water Analysis Methods for Direct Measurement of Samples.

User Defined Methods for Customised Analysis.

Use of Round vials and Rectangular cells of different sizes without Adapter.

SALIENT FEATURES

- ▷ 7" High Resolution Touch Screen LCD Color Graphical Display.
- ▷ Supports USB Pen Drive to Store / Retrieve Mass Spectral Data.
- ▷ Supports USB printing with PCL5e class Printers.
- ▷ Built-In Windows PC Control with MS Excel, MS Word & PDF Support
- ▷ Comes with Automatic Wavelength calibration, programmable wavelength for lamp change over.
- ▷ Lamp selection enables conserving the life of the lamps.
- ▷ >220 pre-defined water analysis methods for direct measurement of samples
- ▷ All types of Reagents like Tablet, Powder & Liquid can be used for analysis
- ▷ Automatic cell recognition facility for different rectangular cells and round vials
- ▷ Instrument 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.
- ▷ Automatic Calibration
- ▷ Automatic wavelength selection based on method
- ▷ Built-in advanced data processing capabilities like 4th order Derivative Spectra, Overlay of maximum ten Spectra, Peak Picking facilities, % concentration mode, Auto-zero facility, spectra Zooming, Smoothing, Data saving, Retrieval and Printing.
- ▷ Barcode Recognition facility to load inbuilt programmes automatically



APPLICATIONS

- ▷ Water Analysis in
 - Drinking Water
 - Waste Water
 - Industrial Process Water
 - Industrial Waste Water
 - Agricultural Water

Common Test for water Analysis

Aluminum	Fluoride	Nitrite
Arsenic	Formaldehyde	Oxygen
Ammonia	Hardness	Ozone
Barium	Hydrazine	Phenols
Boron	Iron	Phosphate
Cadmium	Iodine	Phosphorus
Cyanide	Lead	Potassium
Chloride	Magnesium	Selenium
COD	Manganese	Silica
Color	Mercury	Silver
Copper	Molybdenum	Sulfate
Chlorine Dioxide	Mono Chloramine	Toxicity
Dissolved Oxygen	Nickel	Volatile Acids
	Nitrate	Zinc

- ▷ Many other parameters required in water analysis etc.
- ▷ This Instrument finds place for any Spectrophotometric or Colorimetric measurement where applications require very high-resolution and cGLP compliance is mandatory.

Also Constituents in compositions used in

Metallurgy	Petrochemical
Fertilizer	Steel
Pesticide	Cement
Pharmaceuticals	Glass
Chemical	Other Industries

SPECIFICATIONS

SPECTRAL		PHOTOMETRIC		MONOCHROMATOR
Range	190 to 1100 nm	System	Double beam optics	Concave holographic grating with 1200 lines/mm
Bandwidth	1.8 nm	Range	± 3.3 Abs	CONTROL
Resolution	0.1 nm	Accuracy	± 0.005 Abs at 0.0 to 1.0 Abs ± 0.010 Abs at 1 to 2 Abs	
Accuracy	± 0.5 nm	Linearity	<0.5% T at 2 Abs	Built-in Windows Based PC Control
Reproducibility	± 0.2 nm	Repeatability	± 0.002 Abs at 1.0 Abs	PORTS
LIGHT SOURCE		Stability (Baseline)	± 0.003 Abs/hr. after 2 hour warm up	
Deuterium Lamp (D ₂) & Tungsten (W) Halogen Lamp (or) XENON FLASH LAMP		Stray Light	<0.05% T at 220 nm with Potassium Iodide	
DETECTOR	Silicon Photo Diode	Readability	%T	0.01
			Abs	0.0001

DATA PRESENTATION

Display	7" (800 x 480) High resolution graphical display with touch screen
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.

DATA STORAGE

>220 pre-defined water analysis methods for direct measurement of samples
>200 user programmable methods
Storage for >1000 data sets

POWER REQUIREMENT

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

PHYSICAL DIMENSIONS

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

SAMPLE ATTACHMENT

Standard	Fixed multiple cell holders for Reference & Sample accommodating 10 to 50 mm path cuvettes and 16/24 Round Vials
Optional	Sipper module 10 to 50°C Temperature Controlled cell holder.

ACCESSORIES SUPPLIED

With Instrument	10 mm path length cuvettes, Built in Spectratreats® Software. Built-in user friendly windows based application software for all analysis
At extra Cost	10, 20, 40 & 50 mm path length cuvettes, 16/24 Round vials,



Sample Attachment