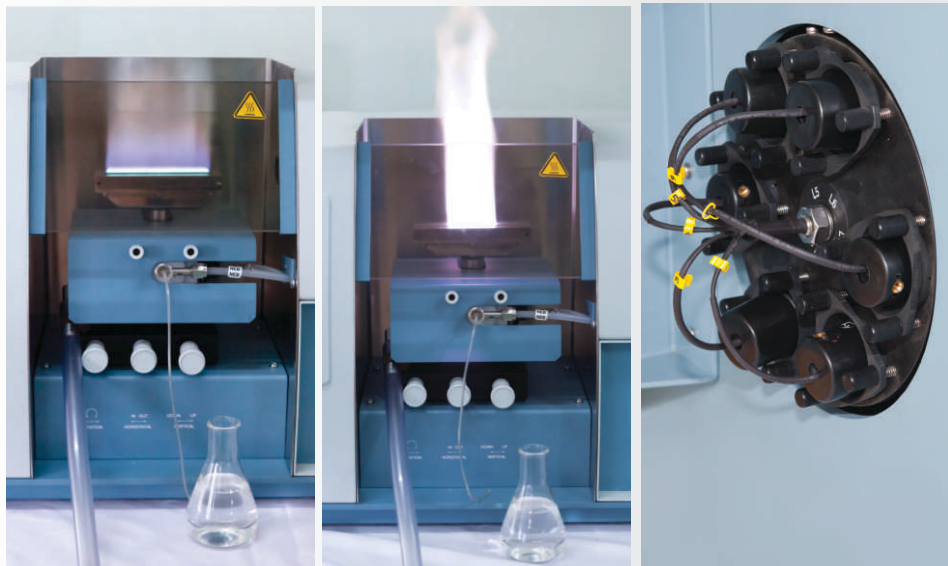




4 line Graphical Display



Gas Box



Burner Assembly with Air - Acetylene Flame

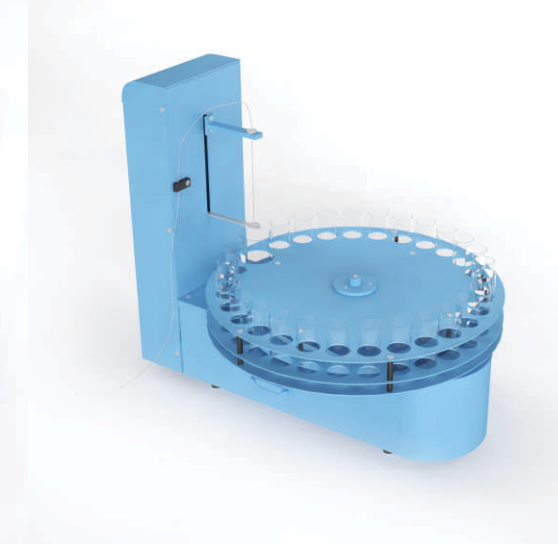
Burner Assembly with Nitrous - Acetylene Flame

6 Lamp Turret

Attachments



Hydride Generator


















Auto Sampler

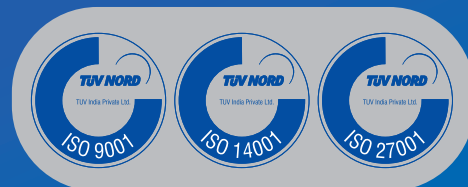
APPLICATIONS

In the fields of



Soil Testing

-  MicroNutrients
-  Agriculture
-  Metals
-  Water
-  Mines & Geology
-  Fertilizer
-  Environmental & Pollution
-  Food & Beverages
-  Oil & Gas
-  Pharmaceutical
-  Coal
-  Glass
-  Cement
-  Research
-  Pesticide



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



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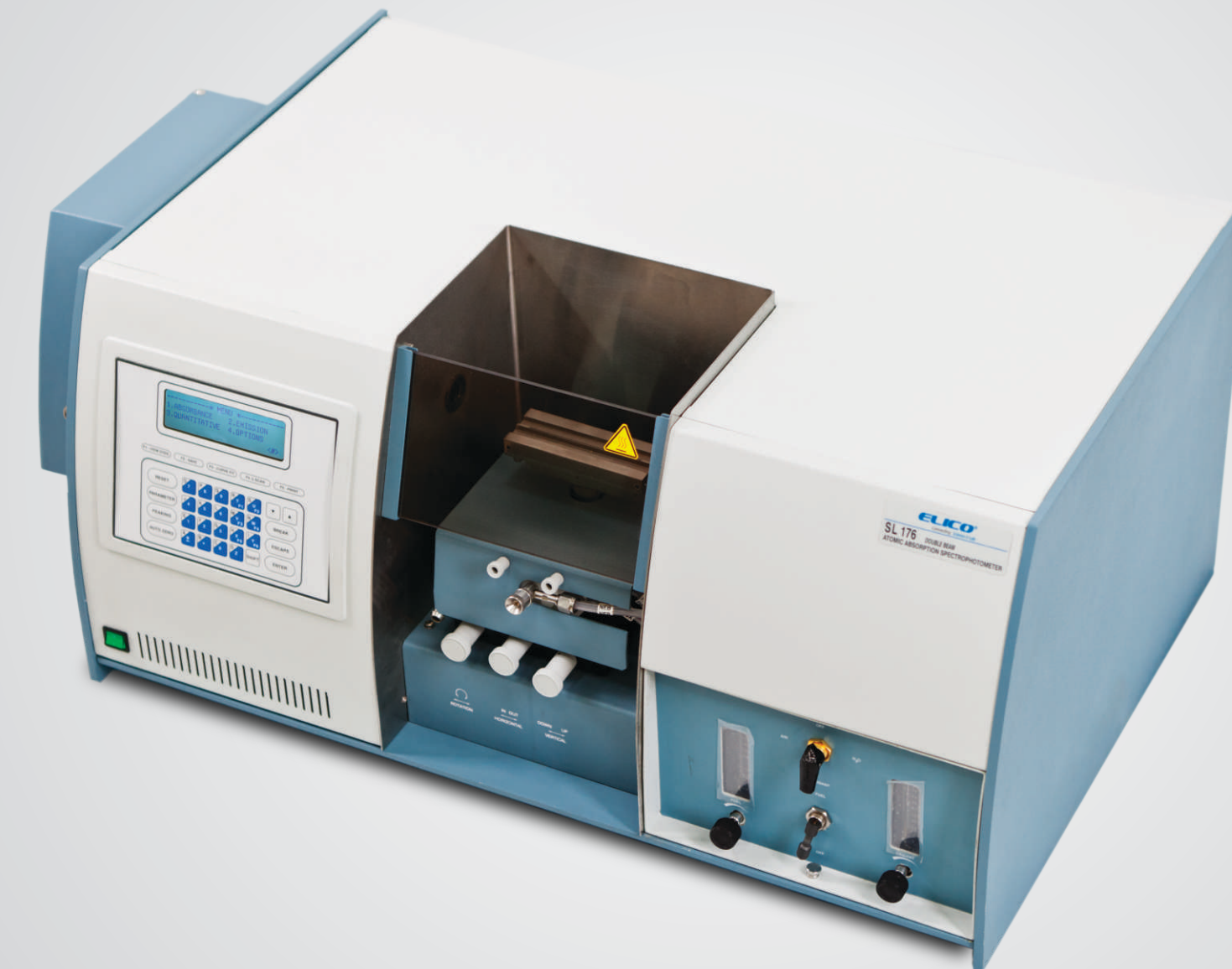
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+91 79 26565402 +91 80 23343470 +91 755 2460817 +91 44 28361949 +91 484 2536380 +91 11 23678736 +91 9433065156 +91 40 23777999 +91 33 32971135 +91 9971092539 +91 22 24110402

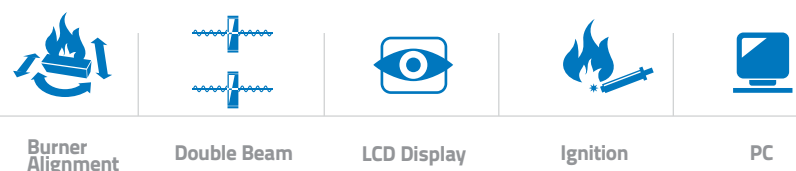


TRUE DOUBLE BEAM ATOMIC ABSORPTION SPECTROPHOTOMETER

SL 176

PRODUCT SPECIFICATION SHEET





High Energy True Double Beam Optics with Narrow Beam, fully sealed and Quartz over coated mirrors .

Automated Six or Eight lamp turret compatible to coded & non-coded Hollow Cathode Lamps with independent Power Supply and Alignment for each Lamp.

Automatic Setting of Parameters by selecting the Element.

SALIENT FEATURES

- ▷ Microprocessor and Microcontroller based user friendly, Menu driven with printer interface and optional PC attachment through USB interface.
- ▷ Modes of operation include Absorbance, Emission and Concentration.
- ▷ Background correction with D₂ lamp source.
- ▷ Auto Saving of all parameters & Auto-Bandwidth Selection.
- ▷ Self Diagnosis, Automatic Wavelength Selection and Auto scan for Peak Searching.
- ▷ Integral Gas Control System with panel Flow Meters.
- ▷ Precise Knobs for Vertical, Horizontal and Rotational alignment of Titanium Burner.
- ▷ The Software has facilities to repeat the result of the sample and data treatment.
- ▷ Automatic calculation of percentage and ppm in base material.
- ▷ Absorbance Mode has the facility to measure sample absorbance for selected number of points and to calculate Mean, SD and RSD.
- ▷ Microsoft Windows® based software for Data processing, Storage, Retrieval and Interpretation etc.
- ▷ **OPTIONAL** : Autosampler Attachment, Hydride Generator.

SOFTWARE FEATURES

- ▷ **Microsoft Windows® based PC operating Software.**
- ▷ Easy User Interface.
- ▷ Linear / Quadratic curve equation to predict the sample concentrations.
- ▷ Modes of operation include Absorbance, Emission, Concentration and Standard Addition.
- ▷ Saving facility for the scanned Data.
- ▷ Energy Profile Mode to scan the energy of HC Lamp, D₂ Lamp and Flame.
- ▷ Print facility for all the scanned Data in Graph and Tabular formats.
- ▷ We provide Open Source Software complying International Quality norms, compatible to run on MS- Windows® Platform.
- ▷ Software is 21 CFR Part 11 compliant with password method protection, Instrument logbook etc.

SPECIFICATIONS

SPECTRAL		PHOTOMETRIC	
Range	185 to 900 nm	Range	0 to 2 Abs
Bandwidth	Automatic variable slit from 0 to 2.5 nm continuously variable with increment of 0.1 nm	Accuracy	± 0.010 Abs at 1.0 Abs
Readability	0.1n m	Integration Time	0.04 to 99 sec
Accuracy	± 0.5 nm	LIGHT SOURCE	
Repeatability	± 0.2 nm	6/8 Lamps Automatic Turret with Independent Power Supply compatible to coded and non coded HC Lamps	
DETECTOR		BACK GROUND CORRECTION	
Wide Range Photo Multiplier Tube (PMT)		Deuterium Lamp (D ₂)	
POWER SUPPLY		MONOCHROMATOR	
HC Lamp	0 to 30 mA modulated	Czerney Turner 1/3 m with 1800 lines/mm Holographic Grating and Hard Coded Optics	
D ₂ Lamp	15 to 300 mA modulated	DATA PROCESSING	
PMT	-200 to -1000 Volts	Microprocessor Mode	1. Absorbance 2. Emission 3. Quantitative Curve fit (Linear and Quadratic)
DATA PRESENTATION		PC Mode	Microsoft Windows® based PC Operating Software with following Operations
Display	240 X 64 dots Graphic LCD Module	1. Absorbance 2. Concentration (Standard Calibration and Addition), Curve fit Options - Linear and Quadratic 3. Emission 4. Energy Profile	
Hard Copy	On printer (Centronics)	FLOW CONTROL	
FLOW CONTROL		BURNER	
Integral Gas Control System with Panel Flow Meters		Titanium construction, Premix, Laminar Flow 100mm burner for Air - Acetylene (C ₂ H ₂).	
FUEL	Acetylene (C ₂ H ₂)	Optional - 50 mm burner for Nitrous Oxide (N ₂ O) - Acetylene (C ₂ H ₂).	
OXIDANT	Air / Nitrous Oxide (N ₂ O)	The Spray Chamber is made of Inert Material i.e., PTFE (Teflon) fitted with adjustable impact bead Aerosol.	

NEUBULIZER		PHYSICAL DIMENSIONS	
Made of fully Inert Material with 90% Platinum and 10% Iridium Alloy Capillary		Size (WxDxH) in mm	822 (+90) x 550 x 395
SAMPLE FEED RATE	3 to 8 ml/min (Adjustable)	Weight (in kg)	Approx. 65
POWER REQUIREMENT		SYSTEM UPGRADATION	
230 V ± 10% AC, 50 Hz, 1ϕ, 200 VA Max.		Instrument can be upgraded to Hydride and Cold vapour Generator	
ACCESSORIES SUPPLIED			
With Instrument	100 mm burner for Air - C ₂ H ₂ , Nebulizer with SS Capillary, Back Ground Correction with D ₂ Lamp, Oil free Air Compressor with 100% Dustfree Air Filter, Acetylene (C ₂ H ₂) Regulator with Flashback Arrestor.		
At extra Cost	50 mm burner for N ₂ O - C ₂ H ₂ , Nebulizer with Pt - Ir Capillary, N ₂ O Regulator, Nitrogen Regulator, HC Lamps for desired Elements coded or non coded, Hydride and Cold vapour Generator, Printer, Computer, PC Software, Exhaust Fumehood Chamber, Servo Controlled Voltage Stabilizer of suitable rating, Acetylene Gas Cylinder, Nitrous Oxide Gas Cylinder and Nitrogen Gas Cylinder.		

ACCESSORIES

