SPECTRUM

SpectraChem®
SC-200EL

Fully Automatic Biochemistry Analyzer

Designed for Specialized/Routine Biochemistry Test Parameters



"Smaller Footprint, Greater Diagnostic Power"

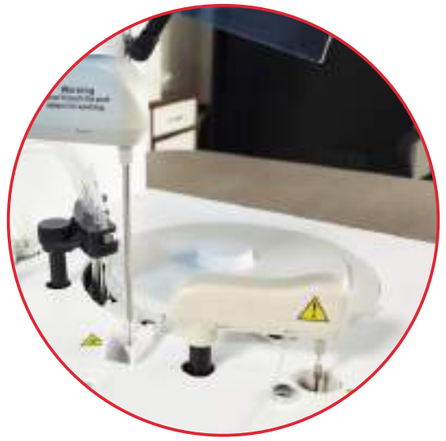
www.spectralab.net

FUNCTIONAL MODULES

Reaction Disc & Cuvette Washer:

- Automatic 7-step Cleaning & Drying.
- Spring style washer needle for internal/external auto cleaning.
- Simultaneous Cuvette Cleaning by Cleaning Solution & DI Water.
- 60 Position long life UV PMMA cuvettes (As standard Delivery).
- Easy Replacement of Individual Cuvette.
- Permanent Optical Glass Cuvette (Optional).





Sample Probe & Regent+Sample Mixer:

- With an independent stirring arm.
- Reagent+Sample Mixing may also be programmed. If the stirrer does not work.
- Reagent/Sample Probe equipped with a Liquid Level Sensor for Reagent & Sample, Probe Crash Detection & Tip of the probe is coated with Teflon.
- Effective outside & inside cleaning mechanism.

FUNCTIONAL MODULES



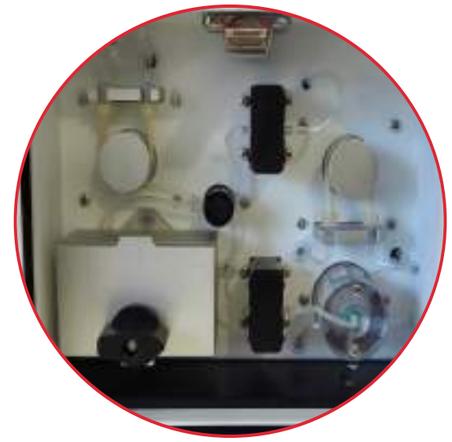


Built-in Maintenance Free Electrolytes:

- Using Biosensor Technology
- Parameters: Na, K, Cl, iCa, pH, tCa
- Each reagent pack comes with biosensor (no electrode required)
- Provides 250Test/Hour for Electrolyte parameters only.

Sample & Reagent Disc with Bottle Cap Ring:

- 40 Cooled Reagent Positions, 18mL and 5mL reagent bottle.
- Unique Bottle Cap Ring with Non-Reactive Cap to Close the Reagent bottles after running the sample.
- Removable Reagent/Sample Tray, can be easily placed directly in the refrigerator after running the sample.
- 40 Cooled Sample Position, Sample may be placed randomly, including Standard, QC, Emergency/STAT,
- The sample may be placed in the primary sample collection tube or sample cup.
- Built-in Barcode Reader for Reagent & Sample.



SC-200EL Special Chemistries:-

• ACE	• ADA	• AMM	• ANTI-CCP	• APO-A	• APO-B	• ASO	• CRP
• C-3	• C-4	• CHE	• COPPER	• CO-2	• CYS-C	• CRP	• D-Dimer
• D-3HB	• ETHANOL	• FERRITIN	• Fructosamine	• HBDH	• Iron	• UIBC	• HBDH
• HCY	• HAPTOGLOBIN	• HFABP	• Hs-CRP	• LACTAT	• Lipase	• LPA	• Lithium
• MALB	• NGAL	• PYRUVATE	• SIALIC Acid	• Vit-D	• FKLC	• FLLC	• CITRIC ACID
• G6PD	• ALDOLASE	• 1,5AG	• TBA	• ELECTROLYTES	• Na	• K	• Cl
				• iCa	• tCa	• pH	

** More parameters will be available soon

Routine Test Profiles:

Cardiac · Pancreatic · Inorganic Ion · Renal · Diabetes · Anemia · Immune · Hepatic · Inflamation · Reumatism · ISE · Lipids

TECHNICAL PARAMETER

Test speed
- Photometric: 200 Test/Hour
- ISE 4Parameters: 250
- Photometric with ISE: 400 to 450Test/Hour

Chemistry on board
- 40 Positions

Analysis method
- End points, Fix-time (two points) , Kinetic, Colorimetry, Turbidimetry, Two wavelength, Double reagent, Multi-standard, ISE 4Parameters.

Unique Feature
- User selectable Reflex Testing, Linearity Check,

Sample disk
- 40 Positions，sample can be placed randomly , including Standard, QC, Emergency/STAT, can use original tube or serum cup.

Reagent disk
- 40 positions, 20mL or 5mL reagent bottle, with water cycle refrigerated compartment function.

Sample volume
- 2-50μl，0.1μl step

Reagent volume
- R110μl～300μl， R2 10μl～250μl， 1μl step

Working Reagent volume
- 180μl～360μl (Recommended 200μl)

Emergency sample (STAT)
- Insert emergency (STAT) sample randomly and can be tested with priority

Sample/Reagent probe
- PTFE Coated, Liquid level detection, Effective outside & inside cleaning mechanism, collision protection.
- System could test automatically the reagent remain in the reagent bottle; trace facility, system could test automatically the sample volume level.

Light source
- 6V, 10W Halogen-tungsten lamp

Wavelength
- WL Range: 340~800nm
  Available WL: 340nm ,405nm,450nm,510nm,546nm,578nm, 620nm, 660nm, 700nm

Wavelength accurate
- ±2nm

Detecting cycle
- 18 seconds

Absorbance range
- 0.0000～4.0000Abs

Resolution
- 0.001Abs

Repeatability
- CV ≤ 2.5% (CV stands for coefficient of variation.)

Stability
- Within one hour , absorbance change is less than 0.01

Cleaning system
- Automatic 7-step cleaning, cuvette drying, spring style needle internal/external auto cleaning

Automatic dilution
- User Programmable

Reagent + Sample Mixing
- With independent stirring arm, stirring immediately when sample is added; for double reagent, stirring immediately after R2 is added.
- User could setup using the aspirator needle sucking up and down to mix optional if stirrer not work.

Reaction disc & Reaction Cuvette
- 60 reusable UV plastic cuvettes
- Glass Cuvette Option Available

Reaction Tem.
- 37±0.1°C, Warm air incubation

Reaction cuvette
- 6.5mm×7mm×22mm, optical path 5mm

Max. reaction time
- 14 minutes

Optical system
- Static optical fiber transit system, optical filter style, multi-wavelength spectrophotometer

QC
- Multi QC function, can insert QC randomly; QC diagrams can be stored, displayed and printed; Can pre-set up different QC material; every test can take 3 different QC material.

Power supply
- 110 or 220V, 50/60Hz, three-cores power cord, well grounded

Fuse
- T10A, 250V

Input power
- 350VA

Operating system
- Windows 10 or Higher

Data processing
- Can edit and store more than 300 testing parameter

Printing
- Multi-format printing modes are available for choosing

Storage environment
- Temperature: -10°C～55°C
- Humidity: ≤95%RH, no dewdrops
- Atmospheric pressure: 50kPa～106kPa

Working environment
- Temperature: 10°C～ 30°C
- Humidity: ≤90%RH, no dewdrops
- Atmospheric pressure: 70.0kPa～106.0kPa
- Water consumption: 5L/hour

Dimension
- 415mm(W)*565mm(L)*350mm(H)

Weight
- N.W.:29kg

Input and output devices (Optional)
- PC keyboard PC mouse Printer Screen

Communication interface
- Instrument: RS-232
- Host computer: RS-232 or Ethernet

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