

Alpha Chem 100c - Technical Specifications

OPTICAL SYSTEM

Flow Cell	30 µl quartz
Light Source	UV Quartz halogen lamp 6V/10W
Temperature	25°C, 30°C, 37°C and room temperature
Temperature Control	By peltier element
Photodetector	UV enhanced silicon photodiode
Cuvette option	Triple cuvette system, 10mm square/Round cuvette with square adaptor (optional)
Filter	7 interference filters (340, 405, 505, 546, 578, 620 and 670 nm) with 3 optional positions
Filter Selection	Filter wheel, through stepper motor

MEASURING SYSTEM

Reaction Volume	350-5000 µl
Aspiration	Peristaltic pump
Photometric Range	- 0.1 to 3.0 Absorbance
Resolution	0.0001 Absorbance
Linearity	≤ 1%
Blanking	Automatic zero setting
Calibration	Automatic against standard with auto storage of graph for all tests

Measurement Methods-

- End point/one point reaction with or without reagent blank and sample blank
- Fixed time/two point kinetics with or without reagent blank and sample blank (with 1 sec change)
- Kinetic test/multi point with or without calibration, factor and sample blank (with 1 sec change)
- Bichromatic with or without reagent blank and sample blank
- Multipoint Calibration of 10 multi-standards with curve fit formula
- Linear, Point-Point, Multi-Point, Logit-Log 4P, Logit-Log 5P, Polynomial, Parabola, Exponential 5P and Spline calibrations with error flags multi-standards
- Absorbance

OPERATOR INTERFACE

Total Programmable Tests	248
Direct Test Keys	48
Quality Control	3 Controls per test with Levey Jenning graph
Display	640 x 480 pixel, Color graphical TFT (5.6")
Touch Screen	Optional
Incubator	Dry bath 6 position
Printer	Graphical inbuilt thermal printer
Air Purge	After each sample
Keyboard	Qwerty alphanumeric membrane keyboard (80 keys) for direct function entries
Communication Interface	RS 232(optional), USB port (optional)
Memory	- 1,00,000 test results - 22320 QC results and graph - Calibration curve and results for all tests - Reagent blank for all tests
Result Recall	Test name, Patient name, Sample ID, Date Available (optional)
LIS Software	Available (optional)
Telemedicine Port	Through WiFi (optional)

PHYSICAL

Dimension	420(W) x 310(D) x 150 (H) mm
Power Supply	AC 110-250V, 50 ±10% Hz
Weight	8 Kgs approx.

ENVIRONMENTAL CONDITIONS

Storage condition	
Temperature	0 - 40°C
Non-condensing humidity	0 - 80 %
Operating Condition	
Temperature	10° - 40°C

ABOUT ALPHA TECHNOLOGIES

We offers a broad portfolio of performance driven In Vitro Diagnostics products and instrumentation for use in hospitals, diagnostic laboratories and research centers worldwide.

Our brand, along with our domestic and international manufacturing partners, provides a high quality, cost-effective alternative for diagnostics instrumentation, assays and reagents for better delivery, more personalized care to patients around the globe.



Alpha Technologies

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Alpha Technologies

Alpha Chem 100c

Semi-Auto Biochemistry Analyzer

NEW GENERATION SEMI-AUTO ANALYZER FOR CLINICAL INVESTIGATIONS



Peace of mind guaranteed

Semi-Auto Analyzer

Alpha Chem 100c

CLINICAL

Autoimmune (Turbidometric method) – CRP, IgA, IgG

Anaemia – Hemoglobin, Fe, TIBC, Transferrin, GDH

Basic Metabolic profile – Amylase, Albumin, Glucose, Globulin, HBA1c, HBD, Lipase, LDH

Cardiac – CK-MB, CK-NAC, CRP, Cholesterol, LDH, Lipoprotein-a, Triglyceride

Diabetes – Glucose, Glucose Hexokinase, HBA1c, Microalbumin, Cholesterol, Total protein

Electrolytes – Ammonia, Bicarbonate, Calcium, Chloride, Iron, Magnesium, Phosphorous, Potassium, Sodium, Zinc

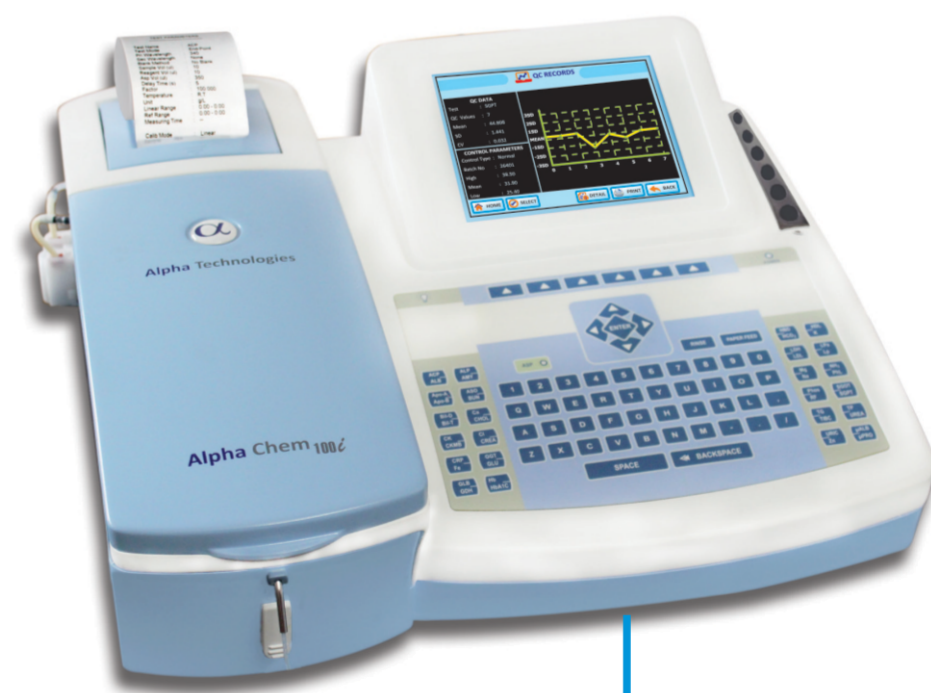
Inflammation (Turbidometric method) – ASO, CRP

Lipid Profile – Apolipoprotein A, Apolipoprotein B, Cholesterol, HDL-Cholesterol, Lipoprotein-a, LDL-Cholesterol, Lipase, Triglyceride, VLDL

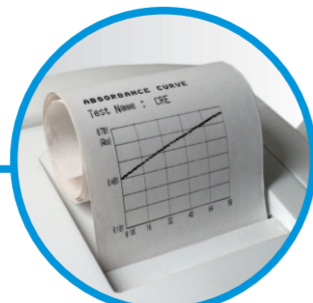
Liver profile – Aldolase, Albumin, Alkaline Phosphatase, Acid Phosphatase, Bilirubin, Cholinesterase, GGT, Micro albumin, SGOT, SGPT

Kidney profile – Blood Urea Nitrogen, Creatinine, Globulin, Micro protein, Total Protein, Urea, Uric acid, Phosphorous, Potassium, Sodium, Urinary protein

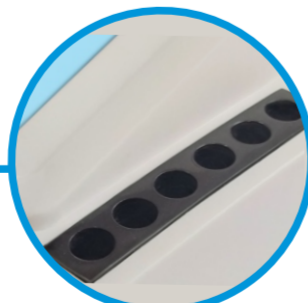
Alpha Chem 100c is a compact, simple, reliable semiautomated analyzer capable to perform tests on whole blood, serum, plasma, cerebrospinal fluid or urine samples to determine concentration of analytes of Routine Biochemistry, Electrolytes, Enzyme etc. Simple on-board step by step instructions ensures consistency of results on which you can rely upon.



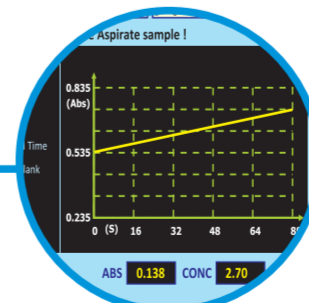
- Software calibrated peristaltic pump for less reagent consumption
- Maintenance free, Long life



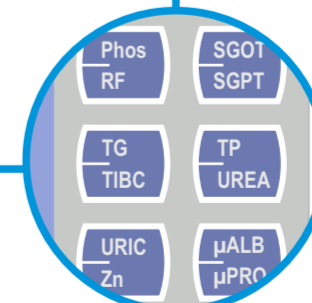
- High resolution graphic thermal printer for multiform reports



- Built-in 6 Position dry bath incubator



- Realtime absorbance curve, Realtime clock, Realtime temperature display on screen
- QC program for 3 controls per tests with westgard rules, Levey-Jennings chart
- Unique feature of Kinetic graph storage facility
- Calibration graph storage for all tests
- Facility to create profiles of various tests



- 48 direct keys to access tests directly from keyboard
- Lamp saving mode indicator on keyboard
- Key to Rinse flow cell at any stage of test

Semi-Auto Analyzer