

Technical Specifications

Operation system

Computer: Built-in operation system - Linux

Screen: 10.4 inch color touch screen Data storage: 100,000 results

Printer: Built-in and external printer

Times. Built in and external print

Others: Soft keyboard

Compatible with keyboard and mouse

Interface:

Ethernet, USB, RS232, VGA, HDMI,

audio, etc.

Working condition

Power supply:

AC $100\sim240\text{V}$, 50/60Hz, $\leq 150\text{VA}$

Temperature: 10-30°C Humidity: ≤85%

Dimension:

384mm*640mm*410mm (L*W*H)

Weight: 30 Kg

Water consumption: $\leq 1 \text{ L/H}$

Reagent/Sample handling

Reagent/Sample tray:

40 reagent positions

20 sample positions

Reagent volume: $10\text{-}300~\mu\text{L}$, step by $0.1~\mu\text{L}$ Sample volume: $2\text{-}70~\mu\text{L}$, step by $0.1~\mu\text{L}$

Reagent/Sample probe:

Liquid level detection,

vertical & horizontal collision

detectionand reagent inventory detection

Probe cleaning:

Auto interior and exterior wash

Optical system

Light source: Halogen tungsten lamp
Photometer: Maintenance-free photometer,

Post spectrophotometry by filters

8 Wavelengths: 340nm, 405nm, 450nm, 510nm,

Lpa

IVD

Lipoprotein (a)

α-AMY

546nm, 578nm, 630nm, 660nm Absorbance: 0-4.5 Abs

Sicuro Bioengineering Ltd

Address: Sicuro House, 19 East West Rd,

Portharcourt, Nigeria. Email: info@sicurobio.com

Albumin Total Protein Aspatate aminotransferase Alkaline phosphatase Alanine aminotransferase Total bile acids Prealbumin y-Glutamyl transferase Direct bilirubin Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase a-L-fucosidase norganic Panel Calcium Natrium Kalium Chlorine	C3 C4 IgA IgG IgM RF ASO LDH α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	Complement C3 Complement C4 Immunoglobulin A Immunoglobulin G Immunoglobulin M Rheumatoid Factor Ascorbic Acid Oxidase Cardiac Panel Lactate dehydrogenase α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid Urea
Aspatate aminotransferase Alkaline phosphatase Alanine aminotransferase Total bile acids Prealbumin γ-Glutamyl transferase Direct bilirubin Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	IgA IgG IgM RF ASO LDH α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	Immunoglobulin A Immunoglobulin G Immunoglobulin M Rheumatoid Factor Ascorbic Acid Oxidase Cardiac Panel Lactate dehydrogenase α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
Alkaline phosphatase Alanine aminotransferase Total bile acids Prealbumin γ-Glutamyl transferase Direct bilirubin Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	IgG IgM RF ASO LDH α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	Immunoglobulin G Immunoglobulin M Rheumatoid Factor Ascorbic Acid Oxidase Cardiac Panel Lactate dehydrogenase α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
Alanine aminotransferase Total bile acids Prealbumin γ-Glutamyl transferase Direct bilirubin Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	IgM RF ASO LDH α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	Immunoglobulin M Rheumatoid Factor Ascorbic Acid Oxidase Cardiac Panel Lactate dehydrogenase α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
Total bile acids Prealbumin γ-Glutamyl transferase Direct bilirubin Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	RF ASO LDH α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	Rheumatoid Factor Ascorbic Acid Oxidase Cardiac Panel Lactate dehydrogenase α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
Prealbumin γ-Glutamyl transferase Direct bilirubin Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	ASO LDH α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	Ascorbic Acid Oxidase Cardiac Panel Lactate dehydrogenase α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
γ-Glutamyl transferase Direct bilirubin Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	LDH α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	Cardiac Panel Lactate dehydrogenase α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
Direct bilirubin Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	Lactate dehydrogenase α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
Total Bilirubin Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	α-HBDH CK CK-MB MYO HCY CREA(OX) UA UREA	α-Hydroxybutyrate dehydrogenase Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
Cholinesterase Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	CK CK-MB MYO HCY CREA(OX) UA UREA	Creatine Kinase Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
Adenosine deaminase 5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	CK-MB MYO HCY CREA(OX) UA UREA	Creatine Kinase Isoenzyme Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
5'-nucleotidase α-L-fucosidase norganic Panel Calcium Natrium Kalium	MYO HCY CREA(OX) UA UREA	Myoglobin Homocysteine Renal Panel Creatinine Uric Acid
α-L-fucosidase norganic Panel Calcium Natrium Kalium	HCY CREA(OX) UA UREA	Homocysteine Renal Panel Creatinine Uric Acid
norganic Panel Calcium Natrium Kalium	CREA(OX) UA UREA	Renal Panel Creatinine Uric Acid
Calcium Natrium Kalium	UA UREA	Creatinine Uric Acid
Natrium Kalium	UA UREA	Uric Acid
Kalium	UREA	
		Urea
Chlorine		
	CO2	Carbon Dioxide
Magnesium	β2-MG	β2 microglobulin
Cuprum	CysC	Cystatin C
Zinc	MALB	Microalbuminuria
Phosphorus	RBP	Human Retinol Binding Protein
Anemia Panel		Inflammation Panel
Iron	CRP	C Reactive Protein
nsaturated iron Binding Capacity	HS-CRP	Hypersensitive-c-reactive-protein
Ferri-albumin	D-Dimer	D-Dimer
Transferrinv	SAA	Serum amyloid A protein
Lipid Panel		Diabetes Panel
Triglyceride	GLU (OX)	Glucose
Total Cholesterol	HBA1C	Glycated Hemoglobin
HDL-Cholesterol	G-6-PD	Glucose-6-Phosphate
	0 IID	
LDL-Cholesterol	β-НВ	β-Hydroxybutyrate
Apolipoprotein A1	FUN	β-Hydroxybutyrate Fructosamine
	Anemia Panel Iron Iron	Anemia Panel Iron CRP Iron CRP Insaturated iron Binding Capacity HS-CRP Ferri-albumin D-Dimer Transferrinv SAA Lipid Panel Triglyceride GLU (OX) Total Cholesterol HBA1C



α-Amylase



CHEMIA 100

Auto Chemistry Analyzer



CHEMIA 100





Features

Convenient

• Built-in 10.4-inch color touch screen

• Built-in printer

• Solid heating, maintenance-free

• Removable reagent disk

Precision

- Reagent inventory monitoring
- Auto reagent refrigeration
- Accurate probe pipetting technique
- Auto probe washing reduces carry-over
- Simultaneous dual-wavelength measuring...

Economical

- Reaction volume: only 150 μL
- Lower water consumption: $\leq 1L/H$
- Halogen lamp up to 2000H
- Reusable cuvette
- Fewer consumable

Integrated

- Small footprint on the desk
- Large reagent and sample compartment
- Built-in computer with touch screen
- Complete solution with reagents
- Powerful data transmission with USB, Ethernet, RS232...



Introduction

CHEMIA 100 is a "Mini-size", fully-auto bench-top chemistry analyzer, the throughput up to 120 tests per hour. It is perfect for low-volume laboratories or as a backup analyzer for mid-to-high volume laboratories.

- » The low cost of ownership of CHEMIA 100 auto chemistry analyzers help laboratories achieve their goals and manage resources effectively without compromising quality.
- » Standardize processes. CHEMIA 100 auto chemistry analyzers features standardized test menus, assay protocols, instrument processes and reference ranges that reduce operator variation and provide consistent quality results.







» System function

General	Benchtop, automatic, random, access, STAT priority
Throughput	Up to 120 tests per hour
Principle	Colorimetry and turbidimetry
Methodology	End-point, fixed-time, kinetic, etc.
Programming	Open or closed system on demand

» Reaction system

Reaction tray	81 reusable cuvettes, auto cuvette washing station
Reaction volume	150 - 750 μL
Reaction temperature	37 ± 0.1°C
Heating method	Solid heating

» Calibration and control

Calibration	K-factor, Linear, Spline, Logit-Log 4P, Logit-Log 5P, Exponential, Polynomial
Control	Westgard multi-rule, Cumulative sum, check, Twin plot, L-J graph