

CS-680 NEW

Auto-Chemistry Analyzer



Overall performance

Equipment type	Fully automatic, discrete, STAT priority
Throughput	600T/H for photometry tests, 1000 T/H with ISE
Test principle	Colorimetry, turbidimetry, ISE
Analysis method	End-point, kinetics, fixed-time, etc. support single/double wavelength
Simultaneous analysis item	110 colorimetric items and 3 ISE items (K, Na, Cl optional)

Sample unit

Sample position	115 sample positions
Sample volume	1.5 μ L~35 μ L, 0.1 μ L stepping
Sample cuvettes specification	Standard cup, original blood tube, multi-specification tube available (Φ 10~13) mm \times (75~100) mm
Sample barcode	code 128, code 39, code 93, I 2of5, UPC/EAN
Sampling technology	Liquid level detection, clot detection and collision protection

Reagent unit

Reagent probe	Liquid level detection and collision protection
Reagent volume	20 μ L~350 μ L, 1 μ L stepping
Reagent position	Double reagent disk up to 112 positions
Reagent barcode	Code128

Reaction unit

Reaction cuvette	120 positions optical plastic cuvettes
Total volume of reaction liquid	120 μ L~450 μ L
Reaction temperature	37 $^{\circ}$ C \pm 0.1 $^{\circ}$ C
Reaction disk constant temperature	Circulating water
Mixing needle	Blending immediately after joining reagent
Reaction cuvette cleaning	7 steps 11 steps by warm water rinsing
Wastewater treatment	Two diffuser for high and low concentration waste water With the function of concentrated waste liquid level alarming

Optical system

Light source	20W/12V halogen lamps
Monochromator	Grating photometry
Photoelectron road	Rear spectrophotometry
Wavelength	340nm~800nm
Detector	Photodiode LED array
OD linear range	0~3.6 Abs

Calibration and QC

Calibration method	1 point linear method, 2 point linear method, multiple point linear method, non-linear method
Calibration tracking	Automatic description calibration K-value trends
QC method	Real-time QC, daily QC and monthly QC
Out of control processing	Alarming for out of control sample, record lost control reason

Operating system

PC operating system	Windows 7/ Windows10 operating system
Analysis control software	English version graphical operating software
Report printing	Report formats support the user-defined mode QC and state information etc.
System connection	RJ45 network interface

Others

Volume	1060mm \times 790mm \times 1150mm(L \times W \times H)
Weight	300Kg
Power supply	Voltage AC 220 \pm 22V, 50Hz \pm 1Hz, power 2000VA



**COMPACT SIZE WITH
ROBUST FUNCTIONS**



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Auto-Chemistry Analyzer

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DIRUI



CE
Certified to
ISO 9001:2008 and ISO 13485:2003

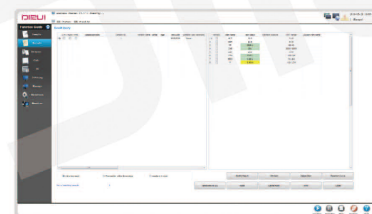
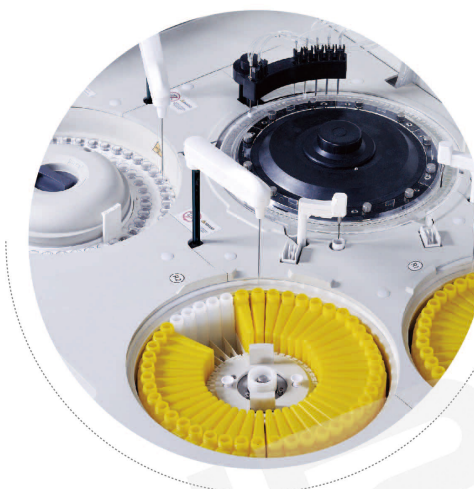
*Specifications subject to change without notice.
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DIRUI

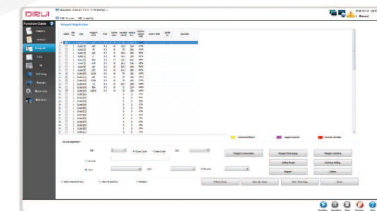
SOFTWARE

DIRUI provides friendly software interface and easy-to-use for all staffs.

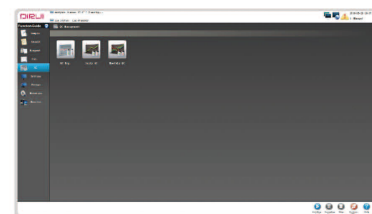
The result interface supports research results in real time, provides reaction analysis, and print result or transmit to LIS (Laboratory Information System). DIRUI refers to Westgard's rules, and generates QC chart and QC statistics for reliable patients' results. The monitor interface displays full sample test status in real-time.



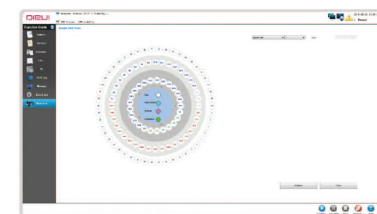
Search result easily by different conditions
check the real time reaction process
Print results and transmit result to LIS



Detect Reagent remain volume
Automatically calculates the remain times.
Online reagent refilling function



The Quality Control generates QC chart
QC statistics and make it easy to identify QC errors.



Display full patient demographics.
View the sample reaction status in real time.

EXCELLENT PERFORMANCE

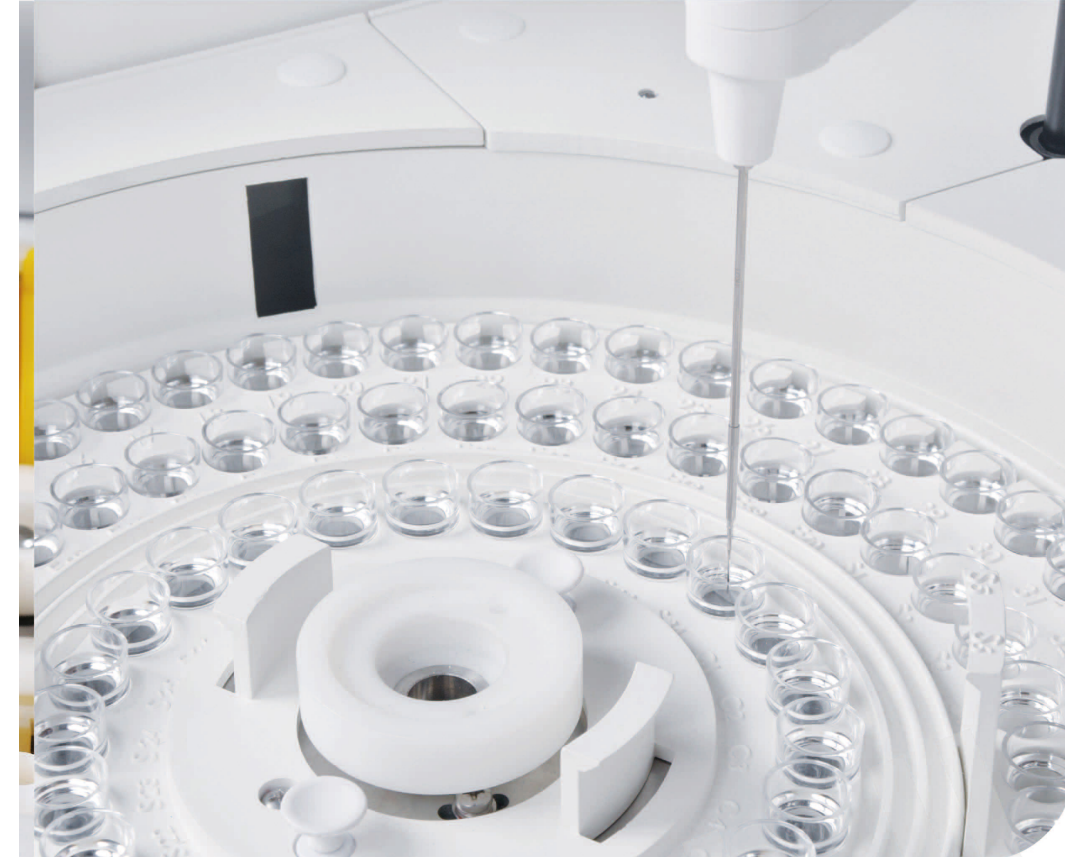
- Automatically cuvette checkup ensure the cuvette clean
- Collision Protection

SAVE TIME AND COST

- Optical diameter 5mm
- Minimum reaction volume 120 μ L

HIGH RELIABILITY

- Large Absorbance Linear Range: Up to 3.6Abs
- High traceability with original reagents, calibrators and controls



DIRUI

A Partner for Life
Auto-Chemistry Analyzer

REAGENT

Hepatic Panel

Alanine Aminotransferase	ALT
Aspartate Aminotransferase	AST
Alkaline Phosphatase	ALP
γ-Glutamyl transferase	GGT
Cholinesterase	CHE
Total Bilirubin DSA Method	TB
Total Bilirubin VOX Method	TB-V
Direct Bilirubin DSA Method	DB
Direct Bilirubin VOX Method	DB-V
Bile Acids	TBA
Total Protein	TP
Albumin	ALB
Glutamate Dehydrogenase	GLDH
Iso-Citrate Dehydrogenase	ICDH
Leucine Aminopeptidase	LAP
Adenosine Deaminase	ADA
Prealbumin	PA
5'-Nucleotidase	5'-NT

Renal Panel

Urea	BUN
Uric Acid	UA
Creatinine Enzyme Method	CRE-E
Cystatin C	CYS-C
MicroAlbumin	MALB
β2- Microglobulin	β2-MG
N-Acetyl-D-Glucosaminidase	NAG
Total Protein In Urine	TPU
Retinol-Binding protein	RBP
α1-Microglobulin	α1-MG

Immune Panel

Immunoglobulin A	IgA
Immunoglobulin G	IgG
Immunoglobulin M	IgM
Complement C3	C3
Complement C4	C4

Pancreatitis Panel

Amylase	AMY
Pancreatic Amylase	P-AMY
Lipase	LPS

Cardiac Panel

Creatinine Kinase	CK
Creatinine Kinase MB Isoenzyme	CK-MB
Lactate Dehydrogenase	LDH
α-Hydroxybutyric dehydrogenase	HBDH
Homocysteine	HCY
Cardiac Troponin I	cTnI
Myoglobin Inorganic & Anemia	Mb

Inorganic & Anemia

Calcium Arsenazo III Method	Ca-ARS
Calcium O-Cresolphthalen Complexone	Ca-CPC
Chloride	CL
Magnesium	Mg
Inorganic Phosphorus	PHOS
Carbon Dioxide	CO ₂
Zinc	Zn
Iron	Fe
Total Iron-Binding Capacity	TIBC
Transferrin	TRF
Ferritin	FER

Lipid Panel

Cholesterol	TC
Triglycerides	TG
High Density Lipoprotein-Cholesterol	HDL-C
Low Density Lipoprotein-Cholesterol	LDL-C
Apolipoprotein A1	APOA1
Apolipoprotein B	APOB
Lipoprotein (a)	LP (a)

Rheumatism Panel

Anti Streptolysin O	ASO
Rheumatoid Factor	RF
C-Reactive Protein	CRP

Diabetes Panel

Glucose Oxidase Method	GLU-OX
Glucose Hexokinase Method	GLU-HK
Glycohemoglobin A1C	HbA1c
Fructosamine	FMN

THE ON-BOARD HEMOLYSIS FUNCTION

- NGSP certification of whole blood latex-agglutination method on analyzer
- Whole blood testing function for HbA1c to avoid artificial error
- Not necessary for centrifugation
- Automatically hemolysis function, easy operation and standardization for HbA1c test

HIGH CAPACITY

- Up to 115 elastic design sample positions, suitable for different size of tubes
- 112 oblique design reagent positions for full use reagent to save reagent and cost

ACCURATE RESULT

- 340-800nm 12 wavelengths
- Digital liquid level detection high sensitivity avoids bubbles' interference
- Reagent inventory management, automatically calculate remaining volume and remaining number