

CS-I200

Auto-Chemistry Analyzer



Specification

System Type	Random access,fully automatic, discrete, STAT priority
Throughput	Constant speed 800T/H for colorimetric test, 400T/H for ISE
Light Source	Long life halogen lamp
Wavelength	340~800nm, 12 wavelengths
Analysis Method	End-point, kinetics, fixed-time, etc.
Calibration Method	1 point method, 2 point method, multiple point linear method, non-linear method
Probe	Independent sample probes, reagent probes, automatic liquid level detection, probe liquid level tracing and clot detection function
Rinsing Mechanism	Probe inner wall high pressure rinsing
Mixing Mechanism	2 independent mixers ensure sufficient reaction
Reaction Cuvette	160 new type reaction cuvettes
Temperature Control	The temperature of reaction disk incubation bath is 37℃±0.1℃
Sample Tube	140 sample positions, supporting multiple tubes and sample cups
Reagent Position	2 compartments, 132 reagent positions and 2 detergent positions in total, with continuous refrigeration; supporting at most 4 kinds of reagents test function
Sample Volume	1.5 ul~35ul, 0.1ul increment
Reagent Volume	15 ul~350ul, 1ul increment
Reaction Volume	Minimum reaction volume 120 ul



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• Specifications subject to change without notice.
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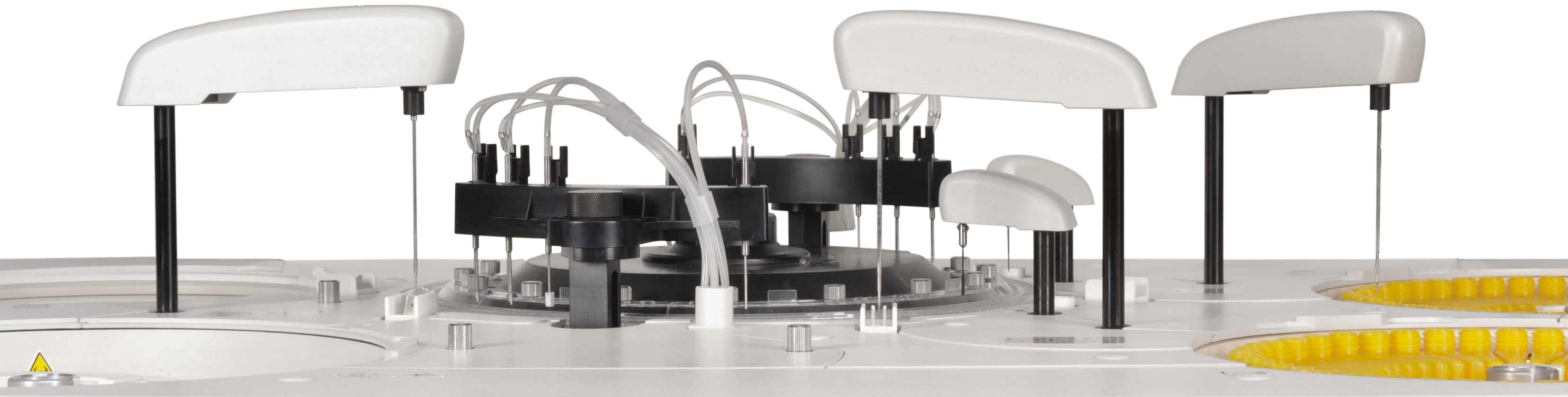
The Next Step in Clinical Chemistry Evolution

DIRUI CS series auto-chemistry analyzers
are used in over 30 countries worldwide.

Through its dedication to quality manufacturing and
world-class customer service, Dirui has established
itself as one of the world's foremost
Manufacturers of clinical chemistry analyzer .

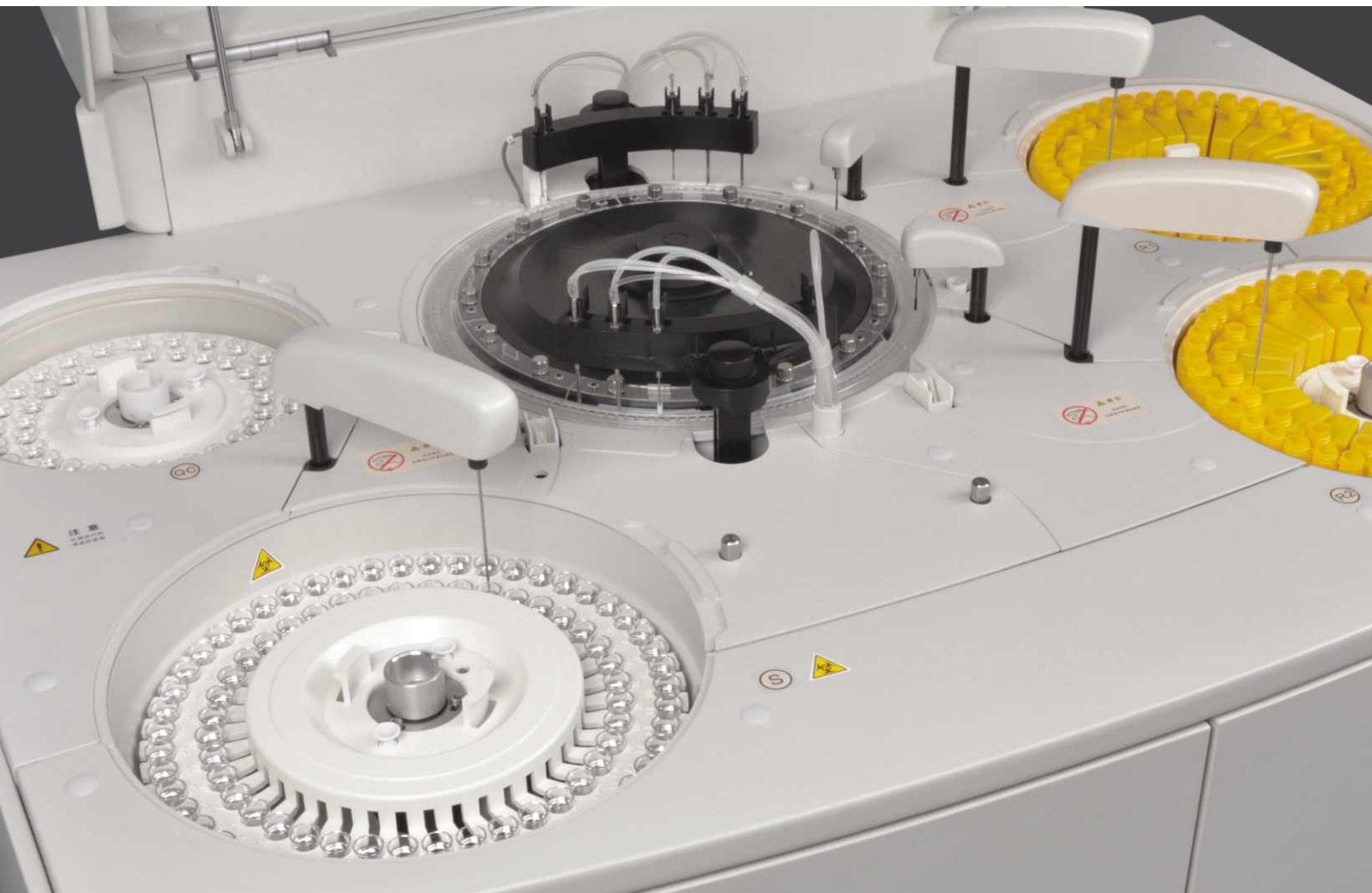
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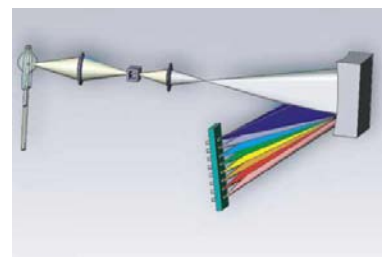
Auto-Chemistry Analyzer



Advanced Photometry System

Holographic concave flat field grating, rear spectrophotometry

- Cluster-condensing light(point light source) technology to enables microvolume analysis, less reagent consumption
- Long life light source adopts circulating water cooling method
- Light source with best position design, no signal attenuation, strong anti-interference
- Anti-ambient light interference to get accurate results



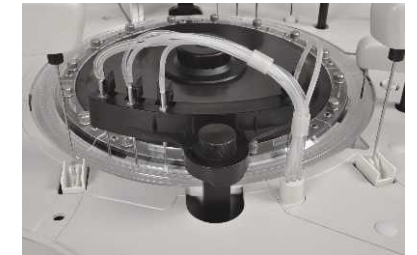
Stable Temperature Control System

A.Cooling System

- Advanced postposition semi-conductor helps direct heat releasing, disks water cooling to ensure stable temperature and easy maintenance

B.Constant Temperature Device of Reaction Cuvette

- Recycling water of constant temperature, automatically changing water and adding defoamer. Reaction cuvettes are immersed into warm water which heats the cuvettes evenly and reduces ambient temperature influence, no need of reagent pre-heating
- PID thermostat technology ensures $37^{\circ}\text{C}(\pm 0.1^{\circ}\text{C})$ variation of temperature control



Accurate Sample/Reagent Pipetting Mechanism

Probe:

- Polished probes with nano processing technology reduces cross-contamination effectively
- Automatic liquid level detection ensures the probes enter the liquid at a perfect depth, reduces liquid suspension
- Collision detection function, self-resetting, automatic sample and reagent pipetting
- Intelligent clog and clot detection: detecting the status of probe clog and the existence of clot
- High pressure rinsing function, enhancing pipetting volume accuracy. High pressure rinsing for inner wall of 3 probes, water fall rinsing for outer wall



Syringe:

- Long-life high-precision ceramic piston ensures high precision of sampling, low maintenance cost
- Water degassing technology removes the air dissolved in the tube system, which ensures quick, accurate and microvolume pipetting
- Senses the remaining volume of sample and reagent, and the remaining test No. of reagent automatically. Notices the operator when the samples and reagents level are too low to ensure continuous analysis



High-Efficient Rinsing System

AAutomatic Cuvette Rinsing

- 8 stops 12 steps rinsing by warm water ensures complete cleaning

B.Probe Inner Wall Rinsing

- Vacuum draining liquid, detergent and warm water high pressure rinsing
- Carryover contamination rate $\leq 0.1\%$, ensures best cleaning status

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Auto-Chemistry Analyzer

Calibration and QC Function

- Linear and non linear calibration; With manual and automatic calibration functions available to select from
- 9 types of calibration curves fitting formulas to satisfy different analysis item's requirements
- Each item can use 6 different levels calibrators at most
- With calibration tracing function; Change-trend chart of K value helps to reduce system error
- Monthly QC ensures that the instrument is working at the best condition
- QC rule: default as Westgard multi-rules
- QC chart: The analyzer plots and prints the relevant L-J chart , Cumulative automatically
- Out-of-control reason and original record function, which complies with the lab QC management

Operating Software

- Graphical operating software, user friendly operation and interface, available in English
- Real-time online help system reduces downtime
- Easy software operation, advanced function, consistent with the requirement of clinical tests
- Multiple self-monitoring functions ensure the intelligentize of the analysis process
- Convenient and efficient data dictionary and information input
- Multiple data query, statistic and report printing function
- Same patient information automatically stored by the software can be recalled with one button
- Multiple report formats(user-defined modification is supported)

Monitoring and Calibration Function

- Multiple checking functions : Over linear limit , over reference limit , substrate depletion, antigen surplus, no reaction equilibrium point , etc.
- Serum checking function avoids interference from hemolytic, lipemic, icteric reagent
- Anti-cross-contamination program to avoid interference from different reagents, samples and reaction cuvettes
- Instrument analysis alarm hierarchical handling to arrange the job sequence by priorities
- User permission hierarchical management to enhance system security



Barcode Scanning

- Automatic routine sample barcode scanning, accurate sample information recognition
- Automatic reagent barcode scanning, accurate, fast reagent information acquisition

ISE Module(Optional)

- Simultaneous measurement of K^+ , Na^+ , Cl^-
- Throughput: 400 T/H
- Long life electrodes



User-friendly Design

Reagent Disks

Newly designed slope angle of reagent disk ;Large capacity of reagent positions;

Two disks allow 132 items to be tested at most

Flexible Sample Positions

Φ 12~16 original tubes and sample cups are available



Advanced Analysis System

High precision instrument, high quality reagents, Control and Calibrator with complete traceability system contribute to advanced analysis system

