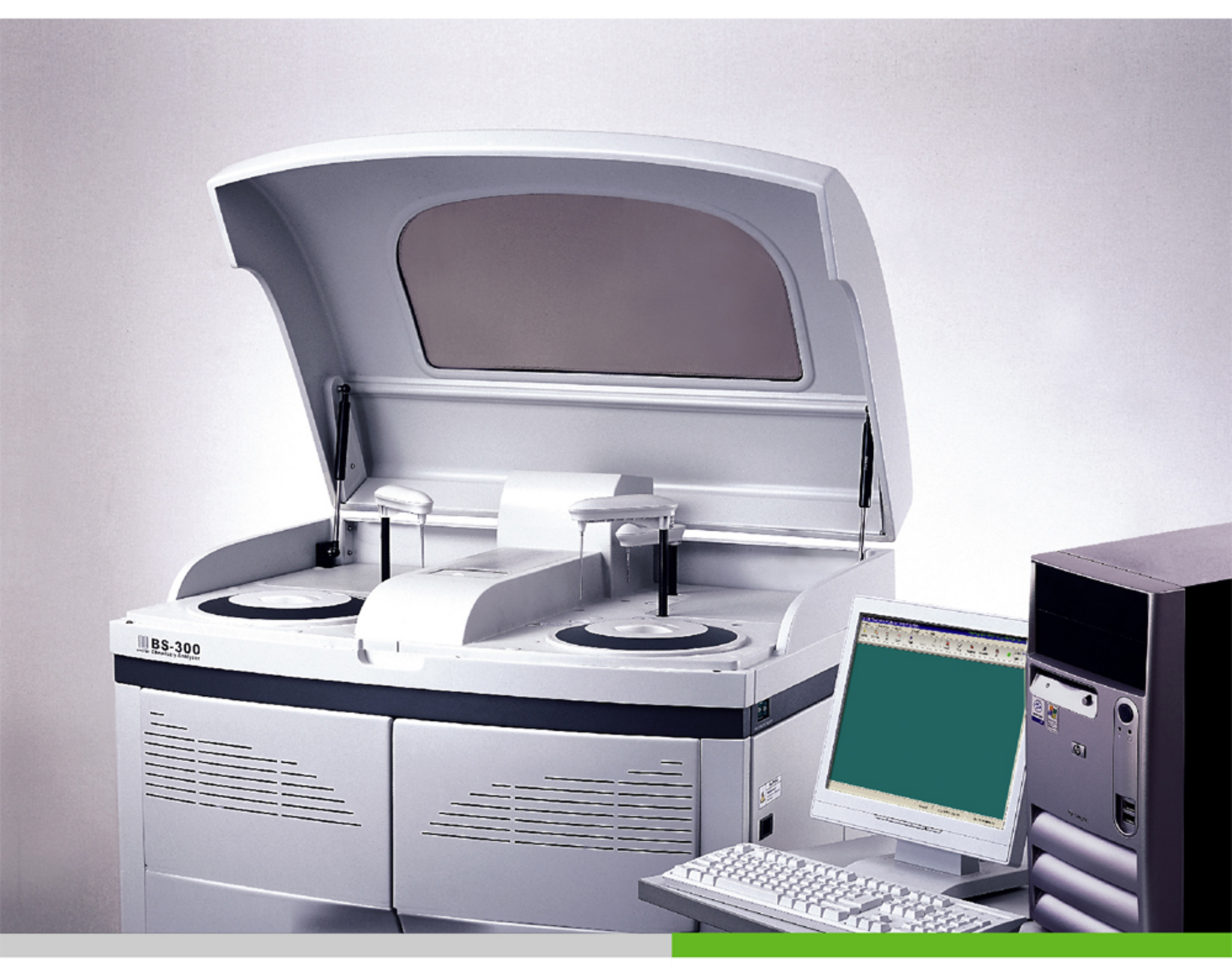
MINDRAY www.mindray.com



BS-300
Chemistry Analyzer

MINDRAY

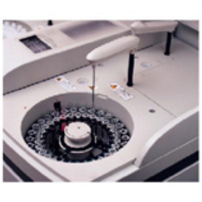
BS-300
Chemistry Analyzer

- Discrete, random access, fully automated
- 300 tests per hour, up to 480 tests per hour with ISE
- Up to 50 onboard chemistries and 4 ions
- Refrigerated reagent compartment
- Onboard capacity of 60 sample positions
- Automatic probe cleaning, liquid level detection & collisionprotection

- 9 wavelengths: 340-700nm
- Automatic abnormality sample dilution
- Internal bar code reader (optional)
- LIS interface bi-directional
- Low carry over

Multi-function reagent probe
- Internal and external probe washing
- Liquid level detection
- Collision protection
- Probe depth adjustment automatically
- Pre-heating

Multi-function sample tray
- 60 sample positions, Non fixed positions for sample, control, calibration or STAT
- Up to 300 samples can be programmed in the 5 virtual sample trays
- Primary tube and various sample cup can be used
- Automatic dilution of high concentration sample



Multi-function sample probe
- Internal and external probe washing
- Liquid level detection
- Collision protection
- Probe depth adjustment automatically
- Sampling for ISE

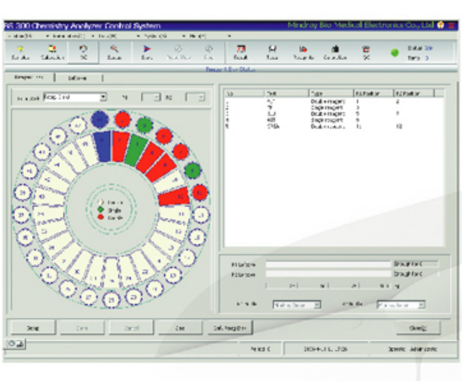
Unique intelligent cuvette loading system
- Disposable cuvette to avoid carry over
- Up to 30 racks on board (300 cuvettes)
- Automated cuvette blank examination
- Intelligent cuvette loading

High performance mixer design
- Optimal homogenization in minimum time
- Absence of cross contamination
- It functions immediately (within the same period) dispending of sample or the second reagent

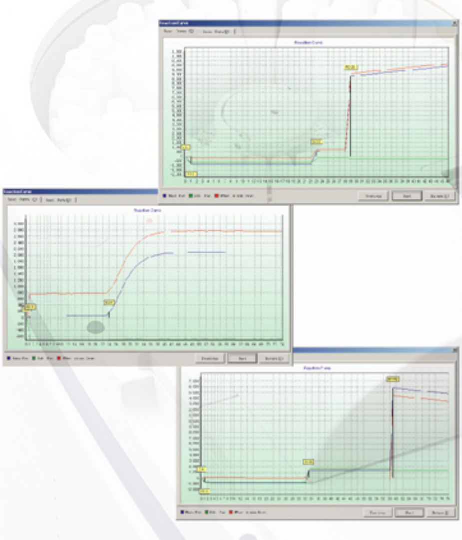
Internal bar code reader
- Used for sample programming
- Be applicable to various bar code systems of code 128, code 39, code 93, codabar, ITF, UPC/EAN
- Capable to link with LIS bi-directional

Refrigerated reagent tray
- 50 reagent positions for R1 and R2
- 24 hour non stop cooling with Peltier element
- Automatic monitoring of reagent residual volume

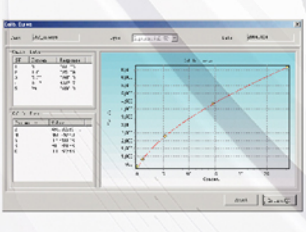
ISE Module
- Optional selection for K^+, Na^+, Cl^- / K^+, Na^+, Cl^-, Li^+
- Throughput: Up to 180 or 240 tests per hour



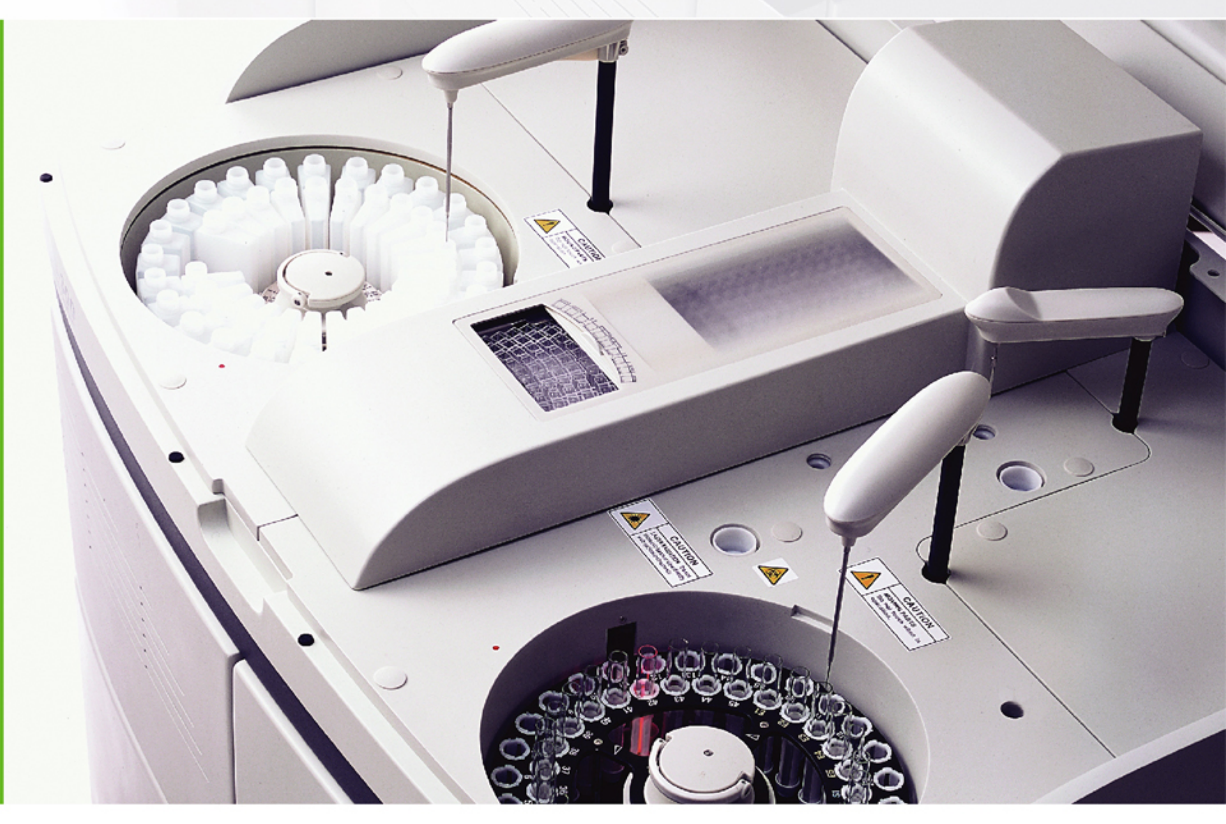
Dynamic and real time display of running status
- Running status of sample tray, reagent tray and reaction tray
- Real time monitoring of reagent residual volume and reaction temperature control curve
- Optimum test sequence setting program to avoid carry over



Original reaction data record
- Real time monitoring of reaction curve
- Simultaneously display primary and secondary wavelengths to avoid interference
- Detailed profile of alert messages
- Real time diagnosis of system working status



Optimum calibration curve
- Selection of calibration methods-Factor, Linear, Point to Point, Spline, Log Logit, Exponential



Enzymes
ALT
AST
LDH
CK
CK-MB
ALP
ACP
r-GT
AMY
HBDH
CHE
AFU
LIP

Substrates
TG
TC
HDL Cholesterol
LDL Cholesterol
Glu
Lactate
UREA
Cr
UA
TP
Alb
TBIL
DBIL
TBA
FMN

Drug of Abuse
Alcohol
Amphetamines
Barbiturates
Benzodiazepine
Cocaine Metabolite
Methadone
Methaqualone
Phencyclidine
Propoxyphene
Amphetamines
Barbiturates
Benzodiazepine
Cocaine Metabolite
Methadone
Methaqualone
Phencyclidine
Propoxyphene

Electrolytes
Na^+
K^+
Cl^-
Li^+

Specific Proteins
APOAI
APOB
Lp(a)
ASO
C3
C4
CRP
IgA
IgM
IgG
Microalbumin
RF
β 2- MG
Myoglobin
TF
FIB
Prealbumin
HbA1c

BS-300
Chemistry Analyzer

Technical Specifications

System Function:

	Automatic, Discrete, Random Access STAT sample priority
Throughput:	300 tests/hour, up to 480 tests/hour with ISE
Measuring principles:	Absorbance photometry, Turbidimetry
Methodology:	End-point, Fixed time, Kinetic, Single/Dual reagent chemistries, Monochromatic/Bichromatic, Linear/Non-linear multipoint calibration
Programming:	User defined profiles and calculation chemistries

Sample Handling:

Sample tray:	60 positions for primary or secondary tubes sample cup
Sample volume:	3~45ul, step by 0.5ul
Sample probe:	Liquid level detection and collision protection
Probe cleaning:	Internal and external washing carry over < 0.1%
Automatic sample dilution:	Pre-dilution and post-dilution Dilution ratio up to 150 Dilution vessel: Cuvette

Lnternal Bar Code Reader:

Used for sample programming
Be applicable to various bar code systems of code 128, code 39, code 93, codabar, ITF, UPC/EAN
Capable to link with LIS bi-directional

ISE Module

Optional selection for K^+, Na^+, Cl^- / K^+, Na^+, Cl^-, Li^+

Reaction System:

Reation rotor:	Rotating tray, 80 disposable cuvettes with automatic loading
Cuvette:	Optical length 5mm
Reaction volume:	180~500ul
Operating temperature:	37± 0.1°C
Mixing:	Independent mixer

Optical System:

Light Source:	Halogen-tungsten lamp
Photometer:	reversed optics, static fiber spot photometry
Wavelength:	340, 405, 450, 510, 546, 578, 630, 670, 700nm
Resolution:	0.001Abs

Control and calibration:

Calibration mode:	Linear (one point, two points and multi-points), Logit-Log 4P, Logit-Log 5P, Spline Exponential 5P,Polynomial 5P,Parabola
Control software:	X-R, L-J, Westguard multi-rule, Cumulative sumcheck, twin plot

Operation Unit:

Operation system:	Windows XP
Interface:	RS-232

Working Conditions:

Power Supply:	200 - 240V~50/60Hz, 1000W or 100 - 130V~50/60Hz, 1000W
Temperature:	15-30°C
Humidity:	35-80%
Water consumption:	3L/hour De-ionized