



**SAL 6000**  
Modular System



**MEDVAL**  
healthcare

**mindray**  
healthcare within reach

# Seamless Integration



SAL 6000 Modular System delivers fast throughput and seamless integration with the SAL 6000 System. In conjunction with the SPL 1000 Sample Processing System, the SAL 6000 System provides a laboratory operator experience.

# Workflow Optimization



Integration of CL-2000i Chemiluminescence Immunoassay System and BS-800 Modular  
This scalable platform not only provides optimized workflow, it also offers satisfac-

# SAL 6000

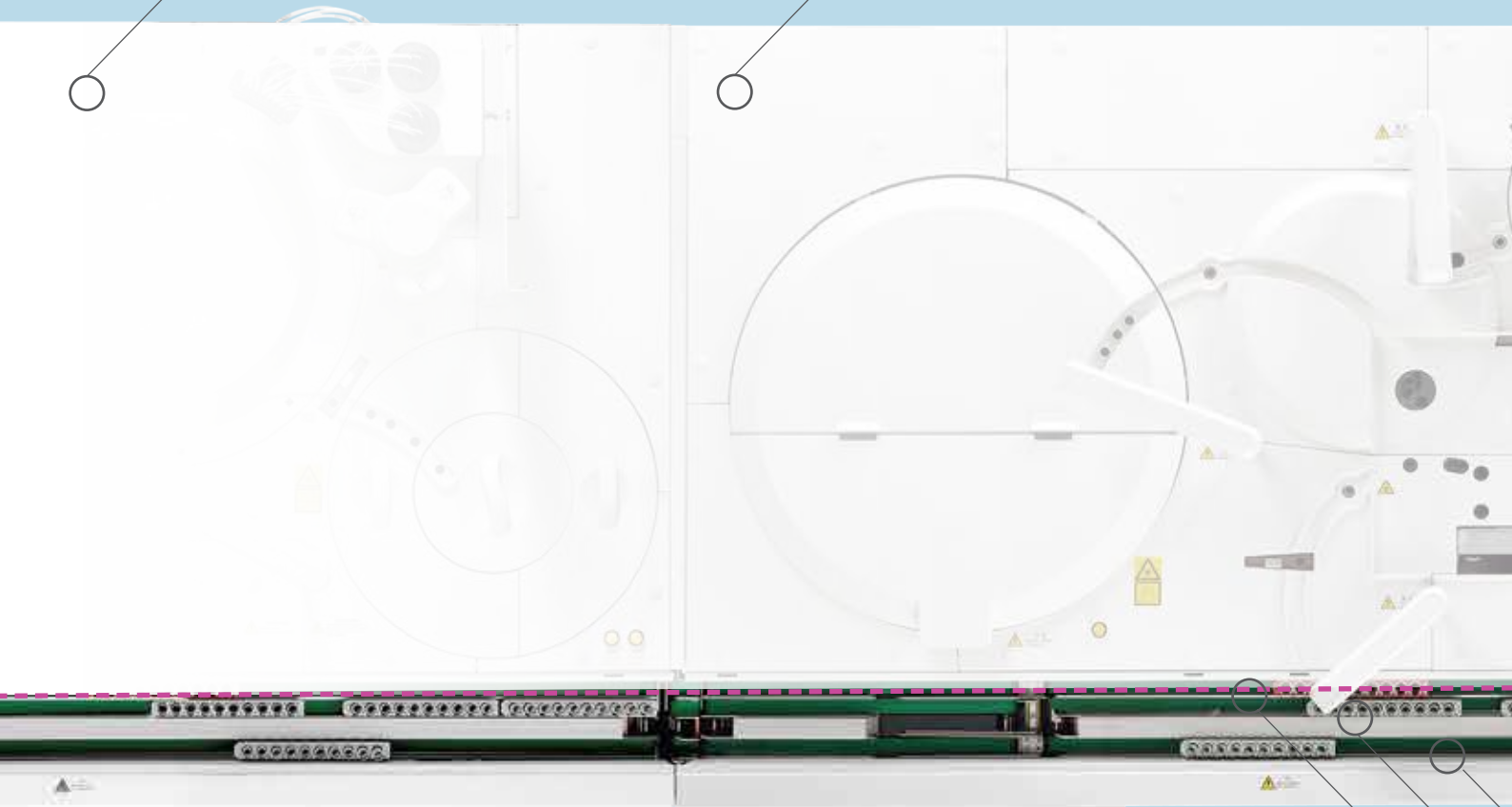
## Modular System

### Chemistry Module

800 photometric tests per hour, 600 ISE tests per hour  
Up to 71 onboard chemistries  
140 positions of integrated sample carousel

### Chemiluminescence Immunoassay Module

New generation of ALP + AMPPD platform  
Up to 240 tests per hour  
36 positions for reagent kits



### SPL 1000 Sample Processing System

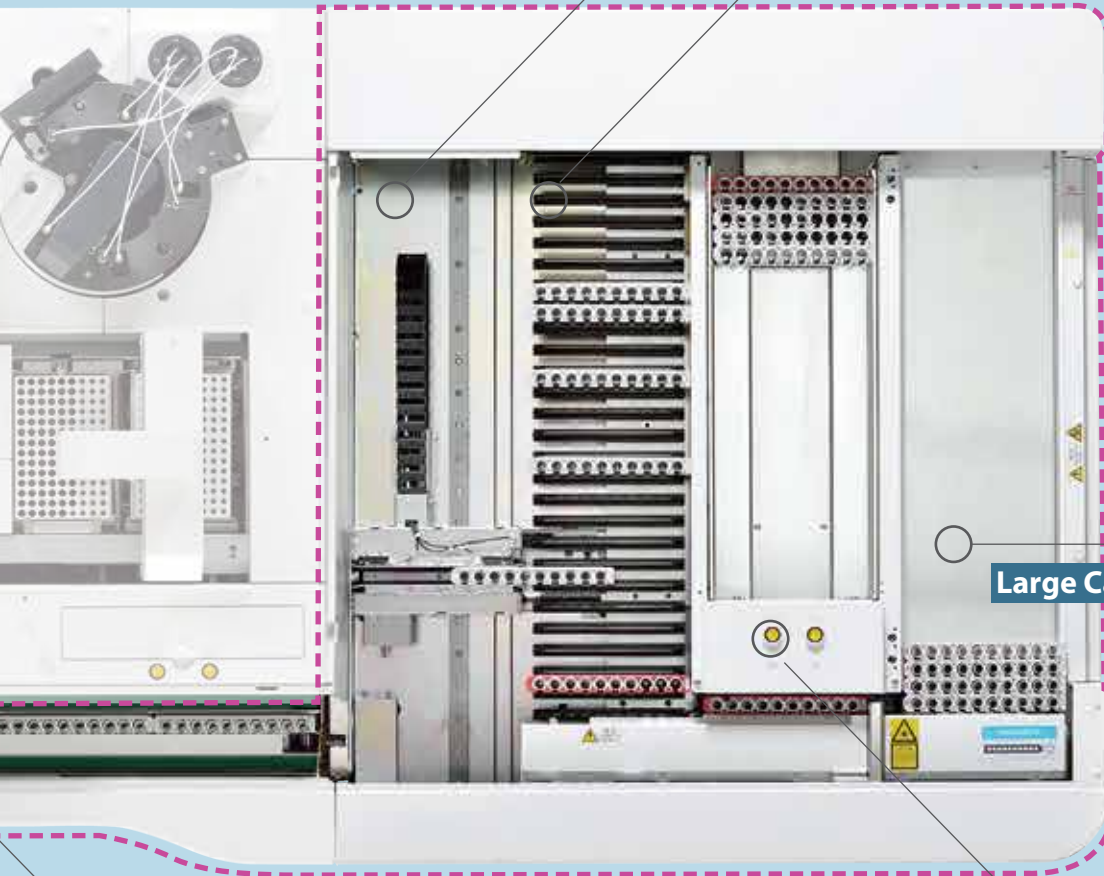
SPL 1000 Sample Processing System, also known as Rack Feeder System; is intended for automatic transfer of laboratory samples among the connected BS series chemistry analyzers and CL series chemiluminescence analyzers.





### Unique Design, Effective Distribution

Uniquely designed rack delivery mechanism with manipulator assembly  
Random access and efficient sample racks distribution  
Up to 10 channels can be customized for STAT racks  
Quick response for STAT, Auto-Rerun and Reflex tests



### Large Capacity, High Throughput

Up to 30 racks loading at a time  
Continuous loading and offloading

### Fast STAT, Quick Response

Dedicated STAT Key and Passing Lane combo on SPL1000 greatly enhanced STAT samples delivery  
Dedicated passing lane delivers STAT racks directly to the module for tests

### Triple Lanes Design, Clear Designation

Passing Lane: Designate for STAT racks fast delivery, and for routine sample racks passing directly to chemistry module  
Normal Lane: For Calibrator, QC, Rerun, Routine sample racks delivery  
Return Lane: For all racks returning to the buffer area





## Uniform Software Interface, Easy to Operation

The user-friendly interface of Mindray IVD systems, namely CL-2000i, BS-2000M series, BS-800M series, BS-480 and future systems; and their intuitive operation commands dramatically reduce operator training hour.



## Integrated Carry-over Prevention Program for Chemistry and Immunoassay Tests

- Carry-over prevention algorithm for chemistry and immunoassay tests
- Special carry-over prevention program for high sensitive immunoassay among modules
- Intelligent rack distribution principle for high sensitive immunoassay
- Enhanced probe washing reduces sample/reagent cross contamination

## Auto-Rerun and Reflex Tests

- Pre-defined reflex and rerun tests will be performed automatically when preset criteria is met
- Quick response for auto-rerun and reflex tests by intelligent rack distribution



## Test Summary Function

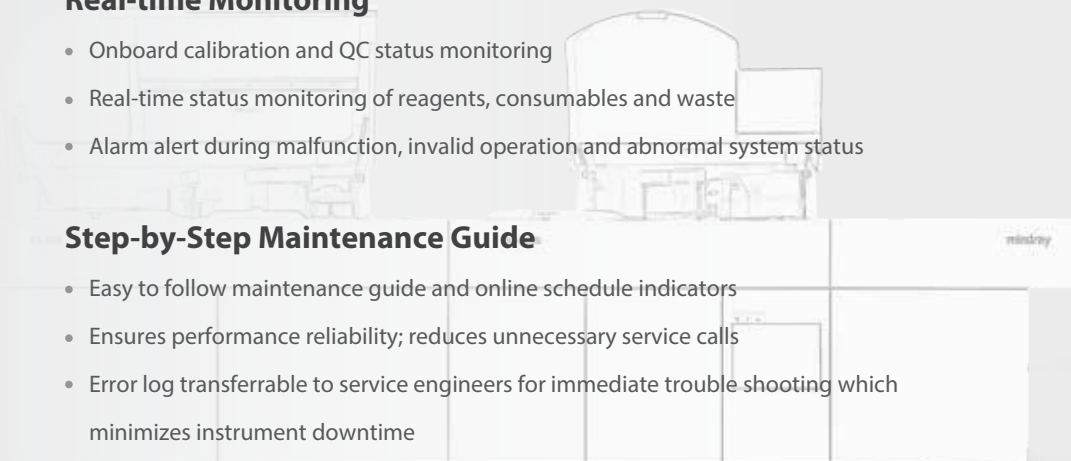
- Test summary of certain period, including calibration, QC, samples, valid tests and rerun tests
- Built-in cost/test analysis, users may define computation within given period
- Archive reports available in excel files for printing, review and future reference

## Real-time Monitoring

- Onboard calibration and QC status monitoring
- Real-time status monitoring of reagents, consumables and waste
- Alarm alert during malfunction, invalid operation and abnormal system status

## Step-by-Step Maintenance Guide

- Easy to follow maintenance guide and online schedule indicators
- Ensures performance reliability; reduces unnecessary service calls
- Error log transferrable to service engineers for immediate trouble shooting which minimizes instrument downtime





## Outstanding Performance, First-class Quality

### Integration without Compromise

Outstanding turnaround time and total throughput

Fast and consistent STAT tests regardless of routine workload

Excellent carry-over prevention for highly-sensitive immunoassay tests

### One Tube Sampling, Flexible to Test

For samples which chemistry tests and immunoassay tests are both requested, the system supports one tube sampling, without additional sample aliquote

### One Platform, One Interface

Single user interface; simplifies workflow and enhances productivity.

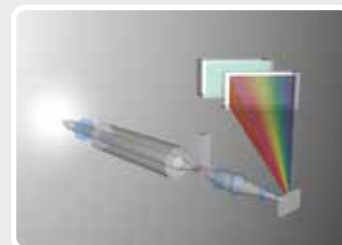




# Technology and Quality Heritage

## Enhanced Optical System

- Dual-lens and dual-diaphragm technology for chemistry systems
- Optimized PMT technology for immunoassay system
- Proven technology minimizes stray light
- Dedicated design to ensure optical reading precision and stability



## High Precision Aspiration

- Precisely controlled syringe motors offer high precision aspiration
- Liquid level detection, clot detection, bubble detection function
- Intelligent vertical and horizontal collision protection
- Automatic recovery from collision without machine stopping



## Efficient Wash System

- Interior & exterior probe wash with high pressure water
- Programmable enhanced probe wash with detergent
- Efficient cuvettes and mixers washing for chemistry module
- Precision control on the tubing system for washing liquid



## Stable Temperature Control

- Proven precisely controlled thermal engineering
- Solid-direct heating technology for reaction cuvettes without any liquid
- Stable temperature control for reagent cooling compartment



## Consistent Software Interface

- User-friendly interface
- Intuitive software navigation
- Large command keys simplifies easy touch screen operation



## Original Manufacturer for Reagents and Instrumentation

- High precision hardware
- Premium quality reagents
- Complete traceability
- Dedicated standardization & traceability laboratory

## Whole Blood HbA1c Test\*

BS-800 module supports Whole Blood HbA1c test, which avoids manual pretreatment of the blood cells; and eliminates error by manual operation.

Mindray enzymatic method HbA1c test, with application of specified protease and Fructosyl Peptide Oxidase (FPOX), has good correlation with HPLC method, proven precision and specificity, better performance to avoid interference from hemoglobin variants, also can be traceable to IFCC/NGSP/JCCL reference methods.

\* In Development

## Flexible Scalability, On-site Upgrading

Current instruments of BS-800M series and CL-2000i can be upgraded to SAL 6000 Modular System at customer site. Also installed SAL 6000 Modular System can be downgraded into independent BS-800M series and CL-2000i according to the customer's requirement.



CL-2000i



















BS-800+CL-2000i



BS-800M

\*Combinations are not limited by the items above.

# Mindray chemistry & chemiluminescence test menu

Anemia		Vitamin, B12, Ferritin(CLIA), Ferritin, RBC, Folate, Fe, TRF, Ferritin, UIBC, G6PD
Liver Fibrosis	LN*, HA*, PIIINP*, C IV*	
Thyroid Function		Thyroid, T3, T4, FT3, FT4, TSH, TG, Anti-TG, Anti-TPO, rT3*, TRAB*
Tumor Marker	CEA, AFP, CA125, CA15-3, CA19-9, FPSA, TPSA, NSE, CA72-4, Cyfra 21-1, PG I*, PG II*, SCCA*, CA50*, ProGRP*, HE4*, CA242*	
Hepatic		ALT, AST, ALB, Prealbumin, TBA, ALP, T-Bil, D-Bil, TP, AFU, CHE, GGT, 5'NT
Electrolyte	Mg, CO2, P, Ca, Na, K, Cl	
Infectious		HIV Combo, Anti-HCV, Anti-TP, HBsAg, Anti-HBc, Anti-HBs, HBeAg, Anti-HBe, ※Anti-HBc IgM, HBeAg Quantitative*, ADA
Renal	MALB, Uric Acid, Urea, Crea, RBP, β2-MG, TP U/CSF, Cys-C	
Fertility		DHEA-S PCT, Prolactin, PROG, β-HCG, E3, LH, FSH, E2, TESTO, free Testo*, 17α-OH PROG*, SHBG*
Endocrinology	Lipase, a-AMY, ACTH, Cortiso	
Growth Hormone		hGH*, AMH*, IGF-1*
Down's Syndrome	PAPP-A* Free β-HCG*	
Diabetes		Insulin, C-peptide, FRUC, Glu, HbA1c, β-HB
Cardiac	CK-MB(Mass), MYO, Troponin I, BNP, AngiotensionI*, Angiotension II*, Renin*, Aldosterone*, HCY, ApoA1, ApoB, TriG, LDL-C, HDL-C, CHOL, D-dimer, a-HBDH, Lp(a), LDH, Hs-CRP, CK-MB, CK	
Metabolic		Vitamin D Total, PTH, Calcitonin
Inflammation	IgA, IgG, IgM, IgE, CRP, C3, C4, RF, ASO, PCT	

# SAL 6000

## Modular System

### Specification

Item	SAL 6000	SDM	CL-2000i *	BS-800 *
Length(mm)	3935	920	1445	1570
Depth(mm)	1016	1016	1016	980
Height(mm)	1145	1145	1145	1145
Weight(kg)	1078	178	450	450

### Power Supply Requirement

Item	SPL 1000	CL-2000i *	BS-800 *
Power supply		110V: 110V/115V~, 60Hz 220V: 220V-240V~, 50Hz, 220V/230V~, 60Hz	
Voltage fluctuation		±10%	
Input power	800VA	≤3200VA	≤3000VA

### Operating Environment

Item	SPL 1000	CL-2000i *	BS-800 *
Temperature		15°C~30°C	
Humidity		35%RH~85%RH, without condensation	
Altitude Height		-400m~4000m, external vacuum pump is required for areas with altitude above 2000m for each module (except SPL 1000)	

\*To be assembled together with Rack Transfer Unit of SPL 1000 during shipment.



Mindray Building, Keji 12th Road South,  
High-tech Industrial Park, Nanshan, Shenzhen 518057, P.R. China  
Tel: +86 755 8188 8998 Fax: +86 755 26582680  
E-mail: intl-market@mindray.com www.mindray.com

**mindray** are registered trademarks or trademarks owned by Shenzhen Mindray Bio-medical Electronics Co., LTD.  
©2015 Shenzhen Mindray Bio-Medical Electronics Co., Ltd. All rights reserved. Specifications subject to changes without prior notice.  
P/N: ENG-SAL 6000-210285x8-20150421



**MEDVAL**  
healthcare

**mindray**