Chemistry Reagents

Hepatic Panel

Alanine Aminotransferase (ALT)

Aspartate Aminotransferase (AST)

Alkaline Phosphatase (ALP)

γ-Glutamyl Transferase (γ-GT)

Direct Bilirubin (D-Bil) DSA Method

Direct Bilirubin (D-Bil) VOX Method

Total Bilirubin (T-Bil) DSA Method

Total Bilirubin (T-Bil) VOX Method

Total Protein (TP)

Albumin (ALB)

Total Bile Acids (TBA)

Prealbumin (PA)

Cholinesterase (CHE)

α-L-fucosidase (AFU)

Renal Panel

Urea (UREA)

Creatinine (CREA) Modified Jaffé Method

Creatinine (CREA) Sarcosine Oxidase Method

Uric Acid (UA)

Carbon Dioxide (CO2)

Microalbumin (MALB)

β2-Microglobulin (β2-MG)

Cystatin C (CysC)

Retinol Binding Protein (RBP)

Total Protein In Urine & CSF (TPUC)

Cardiac Panel

Creatine Kinase (CK)

Creatine Kinase-MB (CK-MB)

Lactate Dehydrogenase (LDH)

 α -Hydroxybutyrate Dehydrogenase (α -HBDH)

Full Range C-reaction Protein(FR-CRP)

Myoglobin (MYO)

D-Dimer (D-Dimer)

Diabetes Panel

Glucose (Glu) GOD-POD Method

Glucose (Glu) HK Method

Hemoglobin A1c (HbA1c)

Fructosamine (FUN)

β-Hydroxybutyrate (β-HB)

Inorganic & Anemia

Iron (Fe)

Ferritin (FER)

Transferrin (TRF)

Calcium (Ca)

Magnesium (Mg)

Phosphate Inorganic (P)

Unsaturated Iron Binding Capacity (UIBC)

Glucose-6-phosphate Dehydrogenase (G6PD)

Lipid Panel

Total Cholesterol (TC)

Triglycerides (TG)

HDL-Cholesterol (HDL-C)

LDL-Cholesterol (LDL-C)

Apolipoprotein A1 (ApoA1)

Apolipoprotein B (ApoB)

Lipoprotein(a) (Lp(a))

Immune Panel

Immunoglobulin A (IgA)

Immunoglobulin G (IgG)

Immunoglobulin M (IgM)

Immunoglobulin E (IgE)

Complement C3 (C3)

Complement C4 (C4)

Rheumatism Panel

C-reactive Protein (CRP)

Rheumatoid Factor (RF)

Antibodies Against Streptolysin O (ASO)

Pancreatitis Panel

α-Amylase (α-AMY)

Lipase (LIP)

Lung Panel

Adenosine Deaminase (ADA)

Angiotensin Converting Enzyme (ACE)

BS-800 Modular System

Clinical Chemistry Solution

BS-800 Modular System

Technical Specifications

System Function: Throughput:

800 photometric tests per hour for standalone unit

and single analytical unit of modular system, up to 1200 tests per hour with ISE

From 800 to 2400 tests per hour for modular system

with different configurations

68 photometric tests + 3 ISEs + 3 serum indices On-board tests:

Sample Handling:

SDM:

Sample tray: 140 positions, including 25 cooled positions for

> calibrators and controls 300 samples by 30 racks

1.5~35 μL, step at 0.1μL Sample volume:

Liquid level detection, clot detection and collision Sample probe:

protection

Reagent Handling:

Reagent tray: 120 positions in coaxial disk for R1, R2, R3 and R4 Reagent volume:

15~300 μL, step at 0.5 μL Liquid level detection, bubble detection and collision Reagent probe:

protection

Built-in Bar Code Reader (optional): Sample and reagent bar code readers support

> Codabar, ITF (Interleaved Two of Five), Code128, Code39, UPC/EAN and Code93; Capable to connnect with LIS in the bi-directional

mode

Reaction System:

Reaction volume: 100~360 μL

37°C with 0.1°C fluctuation Reaction temperature:

165 glass cuvettes with 8-step auto wash Reaction cuvettes:

Optical System:

Tungsten-halogen lamp Light source:

Grating photometer Photometer:

Wavelength: 340nm, 380nm, 412nm, 450nm, 505nm, 546nm, 570nm, 605nm, 660nm, 700nm, 740nm, 800nm

Absorbance range: 0~3.4Abs (10mm conversion)

ISE Module (Optional):

Principle:

Control and Calibration: Calibration mode: Linear (one-point, two-point and multi-point),

Indirect K⁺, Na⁺ and Cl⁻, with 22 µL sample aspiration

Logit-Log 4P, Logit-Log 5P, Spline,

Exponential, Polynomial, Parabola Control rules: Westgard multi-rule, Twin plot

Operation Unit: Operation system:

Windows® XP Professional/Home SP2 or above,

Windows® 7, Windows® 8, Windows® 10

Scalability:

Upgradable to SAL 6000 modular system, a seamless integration of clinical chemistry module and chemiluminescence immunoassay module





mindray





P/N: ENG-BS800M-210285x10-20170921



BS-800 Modular System

Clinical Chemistry Solution

Total Solution for Clinical Chemistry

BS-800 Modular System combines innovation and high performance into an integrated solution. With a scalable platform, an ever more complete line of clinical chemistry reagents, as well as calibrators and controls, our new solution is tailor-made to customers' needs. Our innovative technologies also ensure the solution is accurate, convenient and cost-effcient.

Modular System

BS-800

Throughput: 800T/H, 1200T/H with ISE

Sample capacity: 140 Reagent capacity: 68



BS-800M

Throughput: 800T/H, 1200T/H with ISE

Sample capacity: 440 Reagent capacity: 68



Throughput: 1600T/H, 2400T/H with ISE

Sample capacity: 580 Reagent capacity: 136



Upgradable to SAL 6000

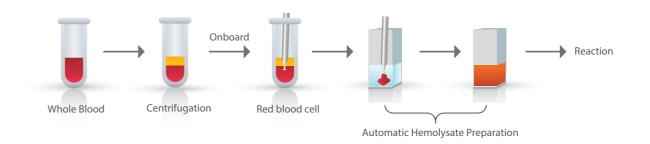
One integrated workstation for both clinical chemsitry and chemiluminescence immunoassay





HbA1c Smart-sampling Technology

BS-800 modular system utilizes HbA1c smart-sampling technology, which allows onboard hemolysis for whole blood samples, thus achieving shorter turnaround time (TAT) and eliminating any biohazardous risks or any errors by manual operation.



Mindray HbA1c assays of enzymatic method, with application of specified protease and Fructosyl Peptide Oxidase (FPOX), has a good correlation with HPLC method. The enzymatic method is proven to have high precision, specificity and better performance to avoid interference from hemoglobin variants, and it is traceable to IFCC/NGSP reference methods.

Accurate



• High pipetting precision 15~300 μL reagent with step at 0.5 μ L, 1.5~35 μ L sample with a step at 0.1 μ L.



refrigeration Ensure a stable refrigeration temperature at 2~8°C in the reagent disk.



• Coolant circulation reagent • Direct solid-heating system Fast heating of reaction disk while the temperature is kept at 37°C with 0.1°C fluctuation.



• Effective mixing unit Independent reagent and sample mixing units; three-head mixing bars speed up process performance. The two-step washing significantly reduces potential contamination.



• Intelligent clot detection Can detect and differentiate between a clot, partial clot, and bubbles ensure precise sample aspiration.

Preventive



 Collision protection Vertical, horizontal sample and reagent probes collision protection.



 Waterproof design In the event of liquid splash, the liquid is redirected away from all electronic components with the specially designed cover.



• Maintenance guide Easy to follow maintenance procedures, with embedded troubleshooting guides. Users may resolve issues quicker.



 Covered system The pipetting system is covered to ensure safety. The sample disk is flexible to be partially covered only allowing convenient access



Warning log Extensive log lists alerts operator and service personnel to maintain the system.



Innovative

Coaxial reagent disk

Unique coaxial reagent disks design making reagent replacement time saving and convenient. The semi-opened cover ensures operator safety during operation.



• Reagent bubble detection

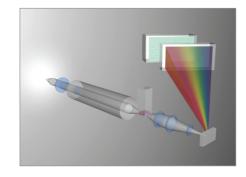
System provides suffcient reagent aspiration through liquid level and reagent bubble detection technology.



Dot light source

The dual focus of forward lighting is possible via the dual-diaphragm and dual-lens technology which creates a high intensity focused light.

Thus, lower the minimum reaction volume and enhance measuring accuracy.



Water quality monitor

The system employs resistance principle. It provides premium DI Water quality for assay analysis and reduces potential contamination.



Cost-efficient

Large capacity

Total sample capacity is 440 (140 positions on the sample tray and 300 positions on the Sample Delivery Module). The Sample Delivery Module automatically delivers samples to the analytical unit. The large sample capacity coupled with 165 washable permanent cuvettes allows the operator hours of walk-away time.

Low reagent consumption

 $100~\mu L$ minimum reaction volume reduces reagent cost. Uniquely designed reagent bottles maximize reagent usage and reduce residual volume.

One key STAT

Dedicated One-Key STAT test button, STAT sample position, and STAT sample rack provide prompt response to the highest priority samples.

• Continuous reagent loading and unloading

Two separate buttons independently control each reagent carousel; it ensures safe and continuous reagent replacement during testing.

Indirect ISE

Low sample volume, high ISE analysis throughput, and cost-effective electrodes.











Mindray solution for clinical chemistry

With more than 10 years of research and development on reagents, Mindray can now provide 62 assays, covering hepatic, renal, cardiac, lipids, diabetes, pancreatitis, inorganic ions, immunoassays and more, as well as original controls and original calibrators with metrological traceability for BS-800 Modular System clinical chemistry analyzer.





Mindray Solution for Clinical Chemistry





Original Calibrators with Traceability:

Reference Method (Certified by 'Joint Committee for Traceability in Laboratory Medicine' (JCTLM))

- International Federation of Clinical Chemistry and Laboratory Medicine (IFCC)
- National Institute of Standards and Technology (NIST)
- Centers for Disease Control and Prevention (CDC, USA)
- American Association for Clinical Chemistry (AACC)

Reference Material

- Institute for Reference Materials and Measurements (IRMM) standards
- National Institute of Standards and Technology (NIST) standards
- World Health Organization (WHO) standards
- Japan Committee for Clinical Laboratory (JCCLS) standards