

# BS-600M

## Chemistry Analyzer

**mindray**

### Technical Specifications

#### System Function:

**Throughput:** 600 photometric tests per hour, up to 800 tests per hour with ISE

**Measuring principles:** Absorbance Photometry, Turbidimetry

**On-board tests:** up to 77 photometric tests + 3 ISEs+ 3 serum indices

**Methodology:** End-point, Fixed-time, Kinetic, ISE

#### Sample Handling:

**SDM:** 120 samples by 12 racks, sample continuous loading, STAT in priority

**Sample volume:** 1.5~45 $\mu$ L, step at 0.1 $\mu$ L

**HbA1c sample:** Whole blood for HbA1c test

**Sample probe:** Liquid level detection, clot detection and collision protection

#### Reagent Handling:

**Reagent tray:** 80 positions with cooling system (2~8 $^{\circ}$ C)

**Reagent volume:** 10~200 $\mu$ L, step at 0.5 $\mu$ L

**Reagent probe:** Liquid level detection, bubble detection and collision protection

#### Built-in Bar Code Reader:

Sample and reagent bar code readers support Codabar, ITF (Interleaved Two of five), Code 128, Code 39, UPC/EAN and Code 93;

Capable to connect with LIS in the bi-directional mode

#### Reaction System:

**Reaction volume:** 70~300 $\mu$ L

**Reaction temperature:** 37 $^{\circ}$ C with 0.1 $^{\circ}$ C fluctuation

**Reaction cuvettes:** 124 reusable cuvettes with 8-step auto wash

#### Optical System:

**Light source:** Tungsten-halogen lamp

**Photometer:** Grating photometer

**Wavelength:** 16 wavelengths (340nm, 380nm, 412nm, 450nm, 480nm, 505nm, 546nm, 570nm, 605nm, 630nm, 660nm, 700nm, 740nm, 770nm, 800nm, 850nm)

**Absorbance range:** 0~3.5Abs(10mm conversion)

#### Control and Calibration:

**Calibration mode:** Linear(one-point, two point and multi-point), Logit-Log 4P, Logit-Log 5P, Spline, Exponential, Polynomial, Parabola

**Control rules:** Westgard multi-rule, Twin plot

#### Operation Unit:

**Operation system:** Touch screen(optional), Windows 10(64bit)

**Interface:** RS-232, Network Port, USB/ parallel port

#### Working Conditions:

**Power Supply:** 200~240V, 50/60Hz, 1700VA or 110/115V, 60Hz, 1700VA

**Temperature:** 15~30 $^{\circ}$ C

**Humidity:** 35~85%

**Dimension:** 1380mm(length)\*860mm(width)\*1200mm(high)

**Weight:** 350kg



# BS-600M

Chemistry Analyzer

## Powerful yet Efficient



[www.mindray.com](http://www.mindray.com)

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healthcare within reach

# BS-600M

Powerful yet Efficient



## Flexible Sample Management

- Sample batch transfer
- Continuous sample loading by racks
- STAT Priority
- Quick rerun



## HbA1c Tests with Whole Blood

- NGSP certified and IFCC traceable
- Onboard hemolysis without sample preparation
- No significant interference from Hb variants
- Lower detection limit of Hb, less rerun rate



## Integrated ISE Module

- 1 blood tube for electrolytes and photometric chemistry tests
- long-life of ISE electrodes
- Easy operation and maintenance



## Reliable Testing System

- World-class and excellent sigma metric performance with original reagent
- Intelligent abnormal reaction detection, alarming and auto-rerun to minimize erroneous results

Small Footprint :

1.2m<sup>2</sup>

Photometric 600T/H  
up to 800T/H with ISE



## HbA1c Tests with Whole Blood



Onboard hemolysis with whole blood  
to improve working efficiency

No manual pretreatment to reduce  
biohazardous risks and human errors

120 T/H for HbA1c test to shorten  
turn-around-time

## Flexible Sample Management

### Continuous Sample Loading

Sample continuous loading by racks  
Up to 120 sample positions  
long walk-away time



### Quick Start for Sample Rerun

Auto start for sample test  
Automatic priority for STAT and rerun

### STAT Priority

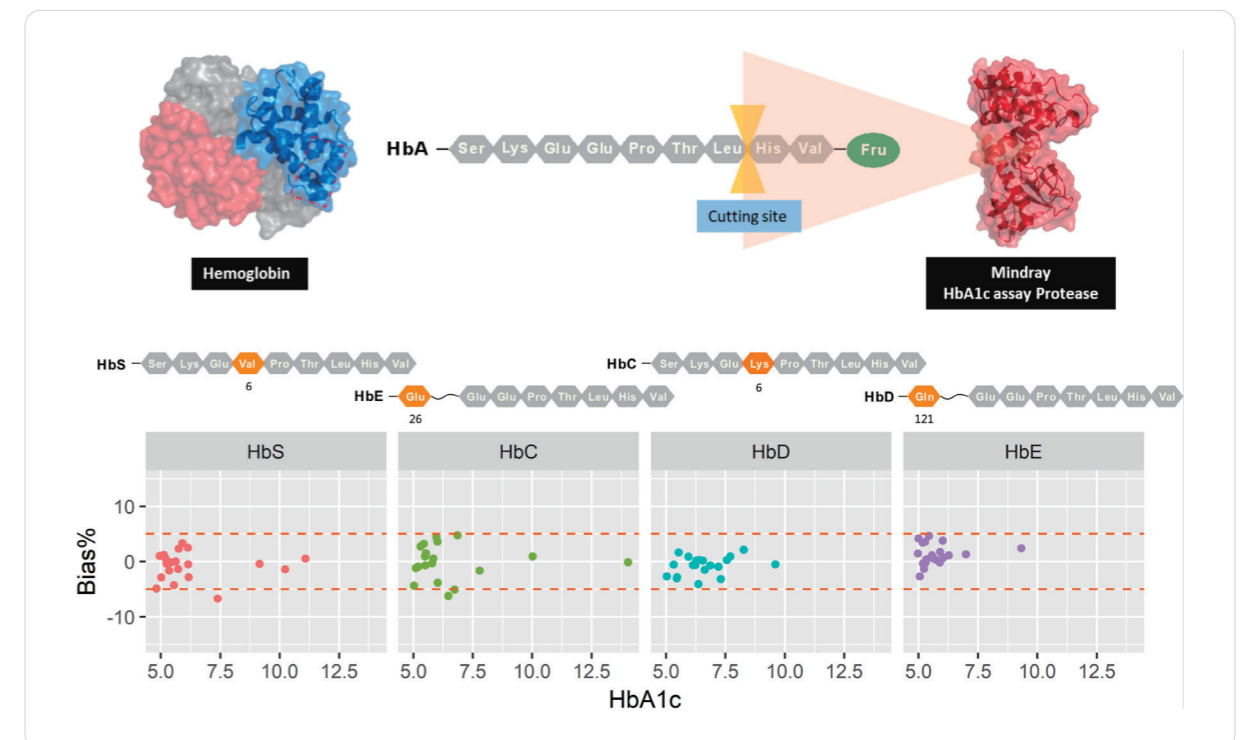
Dedicated STAT position, 1 minute aspiration  
Quick report ISE+CO2 results in 7 minutes

### Smart Dilution

Patented smart dilution function  
Faster report

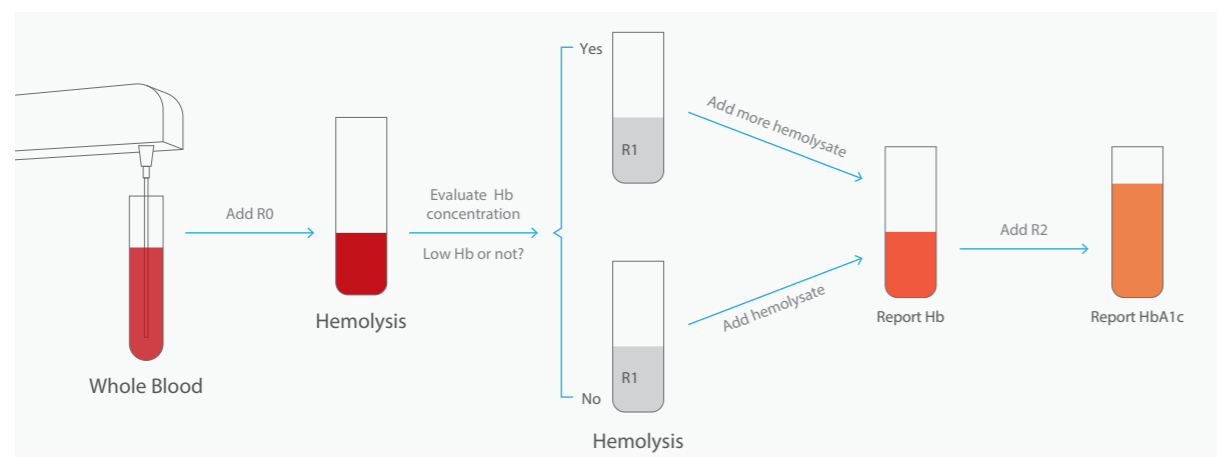
Mindray HbA1c reagent with enzymatic method can specifically detect glycated N-terminal amino acids from the hemoglobin beta-chains, which can effectively avoid interference from Hb variants (HbS, HbC, HbE and HbD) and other Hb derivatives (labile HbA1c, carbamylated Hb, and acetylated Hb).

Mindray enzymatic HbA1c gives reliable and cost efficient result with the first measurement and reduce further confirmations.



## Lower Hb Detection Limit for HbA1c Test

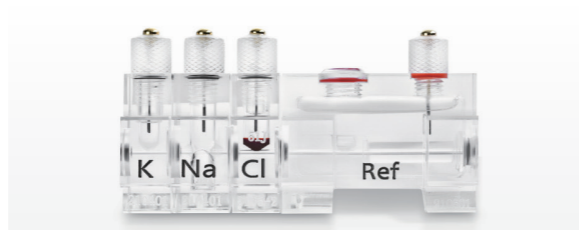
Evaluate the Hb concentration in the process of hemolysis and start sample increasement tests in advance for low Hb concentration samples. This function can lower the detection limit and expand linearity range Hb to reduce the rerun rate and reagent waste for anemia samples.



## Integrated ISE Module

### Built-in ISE Module

- Report Na<sup>+</sup>, K<sup>+</sup>, Cl<sup>-</sup>
- 1 blood tube for electrolytes and photometric chemistry tests



### Efficient and Easy operation

- Up to 300 tests per hour
- Up to 9 months of Na/K/Ref electrodes service time
- Automatic calibration
- Low consumption
- Easy operation and maintenance

## Reliable Testing System



### High Level Sigma Metric Performance

Original reagents and validated application protocol lower the inaccuracy and imprecision which contributes to achieving world-class and excellent sigma metric performance. Higher sigma level system can help laboratories offer high level of quality at reduced cost and enhance clinician confidence and satisfaction.

### Intelligent Abnormal Reaction Detection

Powerful software with in-built algorithms that can monitor the reaction for abnormality, provide flags, and trigger auto-reruns to specimens with abnormal situations in test, such as substrate depletion, oxygen shortage, and hook effects, etc. This intelligent approach with detection, alarming and auto-rerun functions minimizes false results and the risk of a wrong diagnosis, and make reported test result accurate and reliable.

