

# BS-1000M

Chemistry Analyzer

## Technical Specifications

### System Function

Throughput	1,000 photometric tests per hour, up to 1,200 tests per hour with ISE
Measuring principles	Absorbance photometry, turbidimetry
Methodology	End-point, Fixed-time, Kinetic, ISE
On-board tests	Up to 66 (60 photometric tests, 3 ISEs and 3 serum indexes)

### Sample Handling

SDM	180 samples by racks, sample continuous loading, STAT in priority, start in 1 minute
Integrated decapper	Remove tube caps at a speed of 300 tubes/hour, UV disinfection
Sample volume	1 - 25 $\mu$ L, with an increment of 0.1 $\mu$ L
Sample probe	Liquid level detection and tracking, clot detection and collision protection Ultrasonic washing

### Reagent Handling

Reagent positions	109 positions with cooling system (2 - 8°C)
Reagent volume	10 - 200 $\mu$ L, with an increment of 0.5 $\mu$ L
Reagent probe	Liquid level detection, collision protection, bubble detection and automatic removing
Reaction unit	
Reaction volume	80 - 280 $\mu$ L
Reaction cuvettes	206 reusable cuvettes with an optical path of 5 mm
Reaction temperature	37±0.3°C, with ±0.1°C fluctuation

### Optical System

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

### Control and Calibration

Calibration mode	Linear (one-point, two point and multi-point), Logit-Log 4P, Logit-Log 5P, Spline, Exponential, Polynomial, Parabola
Quality control	Westgard multi-rule, Twin plot and L-J graphic rule

### Operation Unit

Operation system	Windows 10 (64-bit)
Interface	TCP/IP network port and USB port
Network connection	Unidirectional and bidirectional LIS

### Environmental requirements

Power supply	110V: 110V/115V~, 60Hz 220V: 220V-240V~, 50Hz; 220V/230V~, 60Hz
Temperature	15 - 30°C
Humidity	35 - 85%
Water consumption	35L/H
Altitude	-400 - 4000m (106 - 61.6kPa). (For areas above 2,000 m, external air pump is required.)
Dimension	1,720mm*900mm*1,230mm (W*D*H)
Weight	≤450kg

# BS-1000M

Chemistry Analyzer

## Powerful yet Efficient



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

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# BS-1000M

Chemistry Analyzer



Footprint  
**1.6 m<sup>2</sup>**



## High Quality Integration

- 1,000 T/H for routine chemistry, up to 1,200 T/H with ISE
- Whole-blood HbA1c, at a speed of 200 tests per hour

## High Biosafety Level

- Integrated auto decapper
- UV disinfection

## High Level of Accuracy

- Ultrasonic washing
- PDR panoramic optical platform
- HILL innovative solution
- Automatic remove of reagent bubbles

# High Quality Integration



## Whole-blood HbA1c

- Results traceable to international standards NGSP/IFCC
- Resistant to variants such as HbE, HbD, HbS, HbC.
- Whole blood sample directly loading, onboard hemolysis
- Lower detection limit of Hb, less rerun rate for anemia samples.



## Photometric Chemistry Tests

- Constant 1,000 tests per hour
- Complete traceability and quality control system



## Integrated ISE Module

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

## BS-1000M Chemistry Analyzer



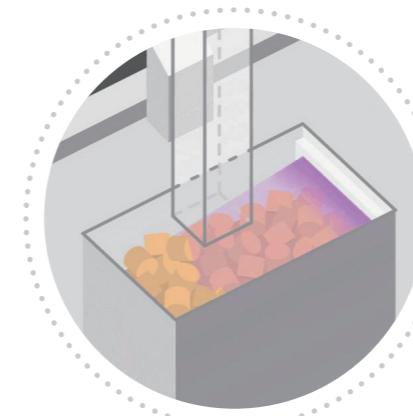
# High Biosafety Level

## Integrated Auto Decapper

-  Removing tube caps at a speed of 300 tubes per hour
-  Enclosed whole decapping process to avoid aerosol emission
-  Manual-like design for smooth and reliable decapping process



## UV disinfection



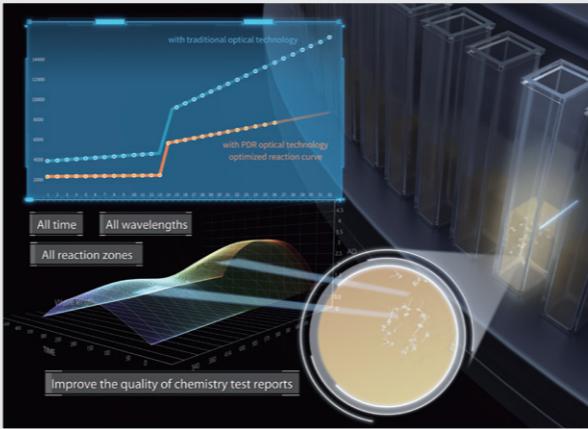
-  UV disinfection of caps to reduce biosecurity risk
-  Integrated auto decapper in an enclosed space, no extra space requested
-  UV lamp intelligent control mode, safe and environmentally friendly

# High Level of Accuity



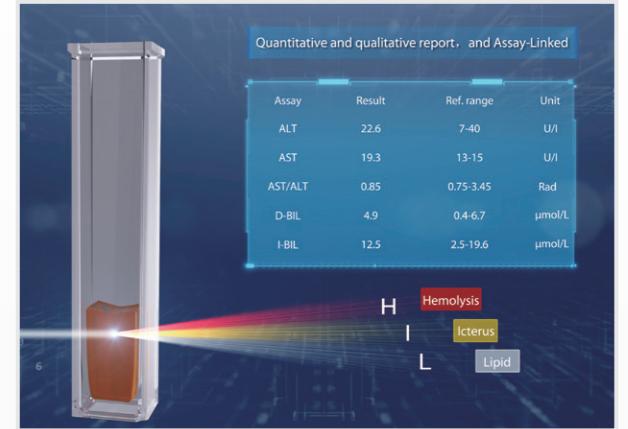
## Ultrasonic washing of sample probe

- Onboard automatic ultrasonic washing
- Carryover rate down to 0.1 PPM
- Free of manual maintenance for sample probe



## PDR panoramic optical platform

- Panoramic dynamic real-time & signal backtracking
- Elimination of various disturbances and noises
- Stable increase of accuracy of the results



Quantitative and qualitative report, and Assay-Linked

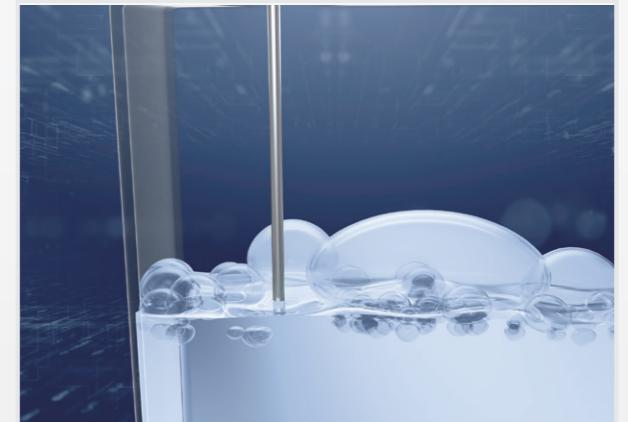
Assay	Result	Ref. range	Unit
ALT	22.6	7-40	U/I
AST	19.3	13-15	U/I
AST/ALT	0.85	0.75-3.45	Ratio
D-BIL	4.9	0.4-6.7	μmol/L
I-BIL	12.5	2.5-19.6	μmol/L

Hemolysis  
Icterus  
Lipid



## Innovative HIL solution

- Automatic testing of serum indexes without deceleration
- Identification of associated assays
- Indication of direction of interference



## Automatic remove of reagent bubbles

- Automatic recognition of reagent bubbles
- Automatic remove of bubbles
- Simplified operation without worrying about the bubbles

