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mindray

Mindray is a leading global designer, developer, and manufacturer of medical devices and solutions, dedicated to making better healthcare more accessible to humanity. Since its foundation in 1991, Mindray has been exclusively focused on the medical industry in the fields of Patient Monitoring & Life Support, In-Vitro Diagnostics, and Medical Imaging. Headquartered in Shenzhen China, Mindray is a multinational corporation with subsidiaries in 32 countries in North and South America, Europe, Africa, and the Asia-Pacific region. Its products and services are available in over 190 countries.

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Mindray is a leading provider of diagnostic solutions encompassing a diverse range of IVD fields.

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Clinical Chemistry & **Immunoassay Systems**

Modular Systems Stand-alone analyzers Semi-auto and Bench-top analyzers Clinical chemistry reagents









Urine Sediment

77-80 Coagulation

> Our solutions are designed to give you accurate results quickly, efficiently and conveniently.

Smarter workstation, Simpler workflow



CAL 8000

New Generation Cellular Analysis Line







Simpler Workflow

Workflow with CAL 8000 makes a big difference. Onboard management software together with optimized DMU software help users organize their workflow better.

Adaptive Solutions

Various configurations of CAL 8000 from 1+1 to 4+2 can fit different types of customers from 125 tests per hour to 500 tests per hour throughput requirements.

Less Blood Smears

BC-6800 utilizes the Mindray's unique SF Cube to analyze blood cells, which can construct a 3D scattergram making bigger distance between each cluster of blood cells to ensure a more accurate flags for pathological samples. It means, less false positive and false negative rates resulting in less blood smears.







SC-120 Slide Maker & Stainer

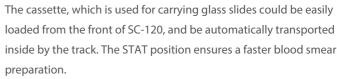


Up to 120 slides

Dynamic

SC-120 is a stand-alone unit and it could also be integrated into the Mindray CAL 8000 cellular analysis line.





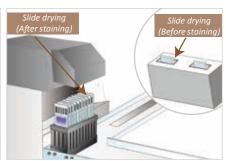
High Quality

The blood spreader(or pusher) blade is made of highly durable sapphire glass. Each staining cassette holds single slide for staining, this eliminates the problem of stain evaporation and these cassettes could be cleaned automatically without any manual interventions. All slides are heat dried before and after staining. This optimizes staining quality and reduces contamination risk for the users.









Envision Higher Clinical Value for ALL Labs

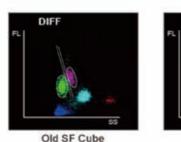
BC-6000 Series

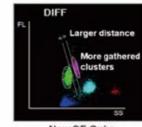
The BC-6000 Series, including the Auto Hematology Analyzers BC-6000, BC-6200 and BC-6800Plus, as well as the Cellular Analysis Line CAL 6000, are developed to address real challenges in frontline clinical settings. The BC-6000 Series delivers more than expected in terms of **Value, Operation** and **Cost performance**.

Value +

New SF cube technology

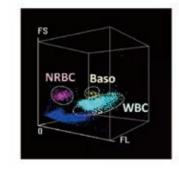
Inheriting from Mindray's high end hematology platforms, the SF cube cellular analysis technology is upgraded with newly designed optics and reagent systems. It can help doctors to better differentiate the clusters of cells, thus revealing more abnormal cells.





NRBC result in every CBC In the WNB channel, Mindray BC-6000 S

In the WNB channel, Mindray BC-6000 Series Hematology Analyzers produce NRBCs, Basophils and WBCs results without extra reagent or cost. NRBCs can be well differentiated from Basophils and WBCs on the systems, ensuring more accurate WBC counting and helping doctors to diagnose hemolytic anemia and monitor hematopoietic diseases.



Body fluid tests

Besides blood samples, the BC-6000 Series can analyze body fluid -- including peritoneal fluid, pleural fluid, cerebrospinal fluid (CSF) and synovial fluid -- without requiring dedicated reagents.





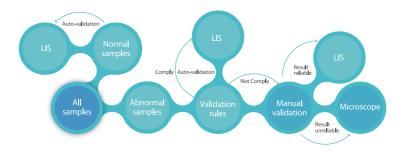




Operation +

More intuitive labXpert software

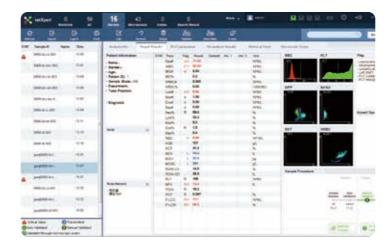
The labXpert software is a standard configuration of the BC-6000 Series for professional data analysis. The upgraded software optimizes data analysis with auto-validation and auto onboard "re-exam" functions. It also has more intuitive interface, with all necessary information shown on one screen for easier review and manual validation.



Auto rerun and reflex

Auto rerun and reflex is another innovative feature of the BC-6000 Series to optimize operation process. Should the sample results trigger the pre-set criteria, the autoloader of the systems automatically returns the sample racks backwards for a rerun or reflex check.



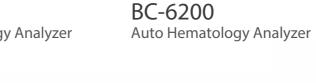


Cost Performance +

Less reagents for routine tests

Compared to the last of similar model, the BC-6000 Series uses less reagents for CBC+DIFF+NRBC tests.

BC-6000 Auto Hematology Analyzer





Throughput: 110 tests/hour Loading capacity: 50 CBC+DIFF



Throughput: 110 tests/hour Loading capacity: 50 CBC+DIFF+RET

BC-6800Plus Auto Hematology Analyzer



Throughput: 200 tests/hour Loading capacity: 100



CAL 6000

Cellular Analysis Line

Benchtop design

2 units of BC-6000 + 1 unit of SC-120, or

2 units of BC-6200 + 1 unit of SC-120

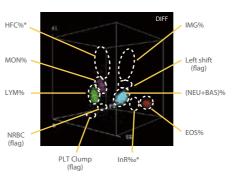
Throughput: 220 sample tests/hour 120 slides/hour

IVD Product Catalog.07



BC-6800 Auto Hematology Analyzer







Up to 125 samples (CBC+DIFF)
Up to 90 samples (CBC+DIFF+RET)
Up to 40 samples (body fluid)

SF Cube

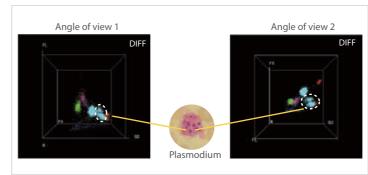
Using 3D scattergram, clusters are well separated which helps in detecting abnormal cells, if any. DIFF scattergram of BC-6800 differentiates WBCs into 4 parts and also provides valuable parameters like HFC*, IMG* InR* and abnormal flags such as Left shift, NRBC, PLT Clump, Atypical Lymphocyte.

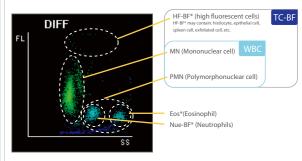
Advanced Cells Screening

Dedicated flags called "infected RBC?" and "InR*(#,%)" parameters can be provided as the possible presence of plasmodium parasite, the causative agent of malaria infection.

Other advanced features like lipid particle interference prevention, low WBC value with extended count time, 4 counting channels to assure WBC numbers, Body fluid analysis and etc.

*For research use only







BC-5150/5000 Auto Hematology Analyzer

Proven Technology

Tri-angle laser scatter + focused flow + chemical dye, creating the possibility for a better 5-part WBC differentiation even on samples with high Eosinophil.

Compact Power

BC-5150/5000 is a dedicated 5-part hematology analyzer with the state of the art technology, simple operations, fewer reagents, all in a smaller more affordable package that will fit any clinicians budget and space.



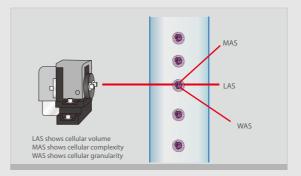


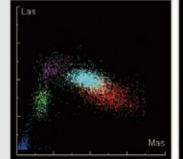


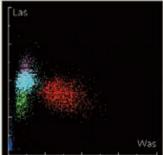
BC-5150



BC-5000







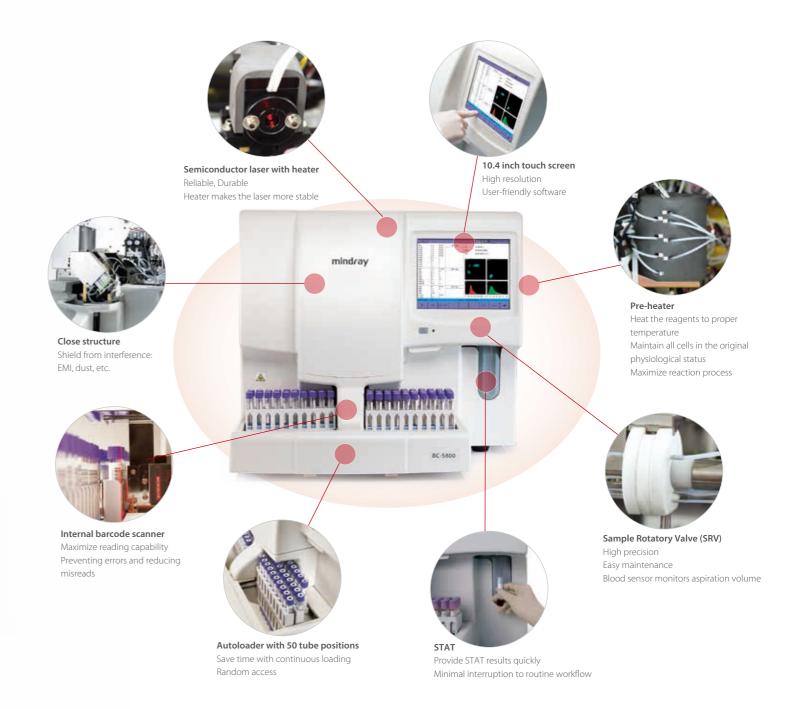
BC-5800

Auto Hematology Analyzer



Up to 90 samples

With proven technology, enhanced structure and components, bigger capacity of autoloader and more user-friendly software, BC-5800 is your good partner and best option for high sample volume clinics.





BC-5300/5380

Auto Hematology Analyzer

Flexible Configuration

Similar features and specification with flexible configurations allows you for different assembly.

Proven Technology

Semi-conductor laser scatter combined with chemical dye method and advanced flow cytometry ensure you accurate results.

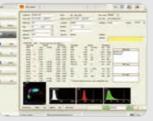


Up to 60 samples (autoloader & open vial)



Up to 50 samples (close tube)











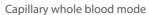
BC-5300 Autoloader BC-5380



BC-5390 CRP Automated Hematology Analyzer

Convenient







Thermostat storage and RF technology



Individual CRP mode

Rapid Dual CRP Analysis Channels for High Throughput

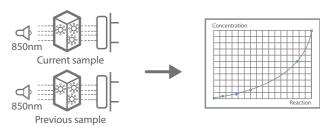
UC lyse

Lysed RBCs iminate interference

Antibody-antigen interaction

Precise

Latex Immunoturbidimetric Technology



Dual channel turbidimetric measurement

Calculation and modification



BC-30s/20s Auto Hematology Analyzer

What a 3-part should be

At Mindray we pride ourselves in our dedication and experience in developing better solutions for small labs. Our new line of 3-part hematology analyzers is the culmination of that effort. Compact yet powerful, full featured yet affordable, the BC-30s/20s is what a 3-part analyzer should be.



BC-30s

Advanced Usability Features

The high-resolution 10.4/8.4 inch TFT touch screen display offers better visual for sample review. Optimized usability such as USB connection, WIFI capability, providing detailed flag information ensures you pleasant operation experience.



BC-20s









BC-10/20/30 Auto Hematology Analyzer







More confidence in results

Advanced detailed flag information provides warning in case of abnormal cell results. High quality original reagent calibrator and quality controls maintain your work at a high level. We integrate technologies into our products to fulfill your clinical needs.

Saving more time

Smart and intuitive software bring your productivity up to a new level. The TFT touch screen makes operations easy and flexible, maximizing your efficiency. The large 400,000 storage capacity gives you an optimized solution to managing previous patients' data. The smart software can detect and remove operational errors, as well as run automatic maintenance with a single click.

Less downtime

Quality and user experience are top priorities for Mindray. We design and manage our manufacturing processes in compliance with FDA, ISO and CE. Complete quality control systems in Mindray's manufacturing centers ensure we exceed the most stringent criteria and traceability throughout the entire process. Our professional and responsive support team makes sure your systems are kept at full capability.



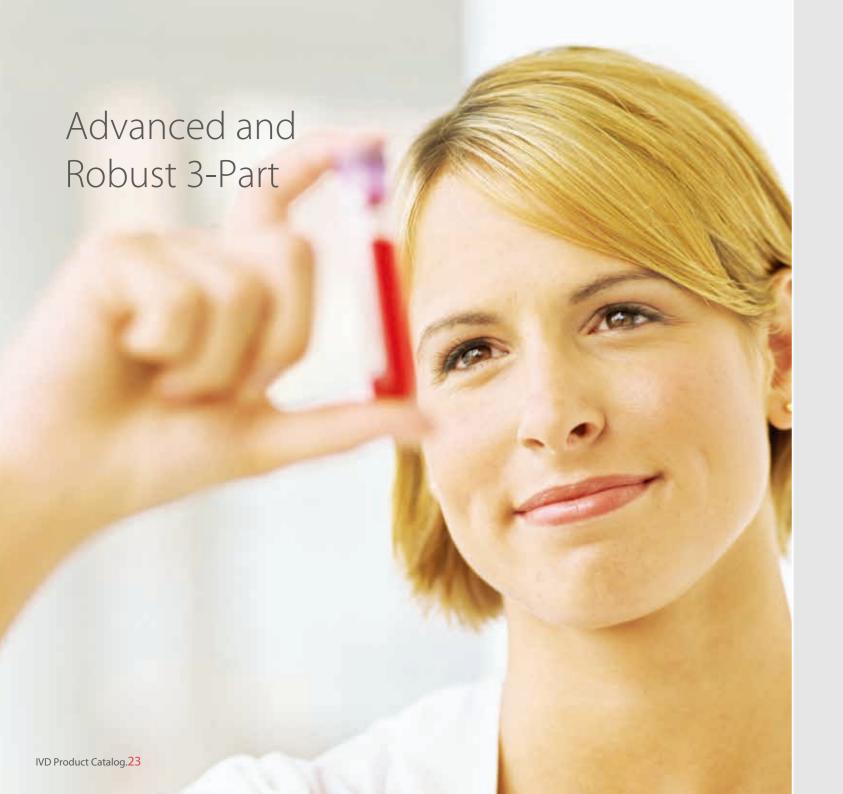
Smallest footprint



Convenient, fast



Perfect for pediatric samples







Intuitive and Powerful Software

The well organized software interface eases your operation and gives you easy control of sample results, patient records, and report customizations.

Complete Data Communication

Integrated HL7 communication protocol makes your LIS connection easier. A wide selection of interface options are available including RS232 for computer connection, USB for QC assay values upload, barcode scanner, and key board connection.

Intuitive and Efficient

Efficient ZAP and flush method removes clog completely. For closed sampling mode, 3 types of tube adaptors are provided to satisfy individual laboratory needs. With the on-line reminder function, users can conveniently monitor the reagent residual volumes through the software.











3-part series hematology analyzer

Your reliable partner for 3-part analysis

BC-2300 Hematology Analyzer



Throughput 30 per hour

Specifications:

Semi auto with built-in dilutor
19 parameters + 3 histograms
2 counting modes
10,000 sample results including
histograms can be saved.

BC-2800 Auto Hematology Analyzer



Throughput 30 per hour

Specifications:

Open vial
19 parameters + 3 histograms
6 counting modes
10,000 sample results including
histograms can be saved.

BC-3000Plus Auto Hematology Analyzer





Specifications:

Open vial
19 parameters + 3 histograms
2 counting modes
35,000 sample results including
histograms can be saved.

IVD Product Catalog.25

"CUTE" solution for veterinary hematology

BC-5000Vet

Auto Hematology Analyzer

Animals Species

16 animal types including Dog, Cat, Horse, Monkey, Rat, Mouse, Rabbit, Pig, Panda, Red panda, Cow, Llama, Goat ,Sheep, Ferret and Camel*.+ 20 self-programmed animals. (* coming soon)

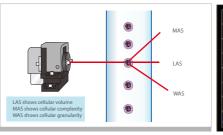
"CUTE" Solution

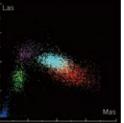
CUTE stands for Compact, Utility, Technology and Efficiency. BC-5000Vet is a dedicated veterinary 5-part hematology analyzer with the state-of-the-art technology, simple operations, fewer reagents, all in a smaller more affordable package that will fit any veterinarians budget and space.

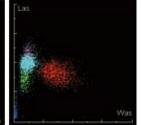


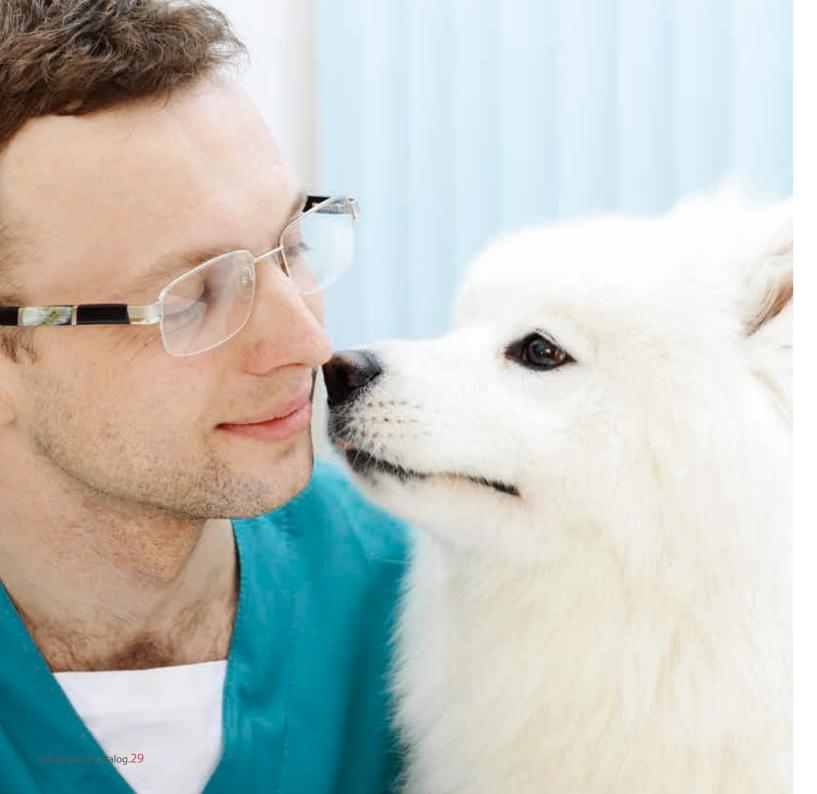
60 Up to 60 samples











BC-2800Vet

Auto Hematology Analyzer



Animals Species

13 animal types including Dog, Cat, Horse, Rat, Mouse, Rabbit, Monkey, Cow, Pig, Buffalo, Sheep, Camel and Goat.

Compact Structure

The compact BC-2800Vet is less than 23kgs with small footprint. It will fit any small clinic's requirement with limited space.

Reliable Performance

Independent counting system for each species to ensure high accuracy as well as fully integrated calibration and quality control programs.











H50 Automated HPLC Analyzer

Gold standard for HbA1c analysis

8.4 inch screen High resolution

User-friendly software





HPLC column
Easy to replace
3,000 tests at least





3 built-in reagents RF* detection Reagents saving



Better mixing by inversion More accurate results



Autoloader

Cap-piercing

40 tubes load capacity Intelligent RF identification

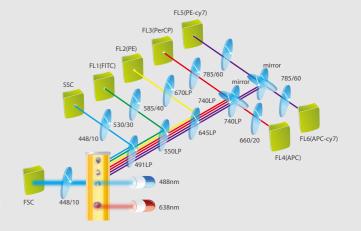


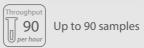


New Star in Flow Cytometry IVD Product Catalog.33

BriCyte E6 Flow Cytometer







Bright

BriCyte E6 is equipped with dual-laser based optics. A red diode laser and a blue diode laser are used for 4 to 6 colors of fluorescence lights. The optics are designed with state-of-the-art technology to ensure higher sensitivity for better identification of cellular populations

Easy

BriCyte E6 has open vial mode which suits the labs which have less number of samples, the micro sample tubes are supported as well. The carrousel mode is yet another option which can handle 40 sample tubes at one time.









Uniform Software Interface, Easy of Operation

Consistent user-friendly interface among CL-2000i, BS-2000M series, BS-800M series, BS-480 and future systems. Intuitive operation commands greatly reduce operator training time.



BS-2000+BS-2000



BS-800+BS-800



BS-800+CL-2000i

BS-2000 Modular System

2000 tests per hour, up to 2200 tests per hour with ISE (1 unit)
Permanent glass cuvettes with 8-stage automatic Washing
Minimum reaction volume is 80ul
Could be extended to SAL8000 system





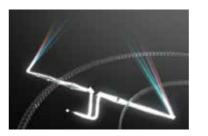
User-friendly Interface



Reflex Function



Step-by-step Maintenance Guide



Enhanced Optical System



High Precision Aspirating





High Performance Reaction System



Efficient Washing System



Stable Cooling Compartment

BS-800M1

Modular System

Throughput: 800/1200T/H

Sample capacity: 440

Reagent capacity: 68

Onboard hemolysis for HbA1c



Accurate



High sampling precision



Water circulation reagent cooling



Direct solid-heating system

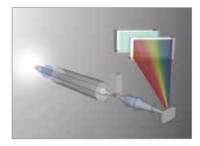
Innovative



Coaxial reagent disk



Reagent bubble detection



Dot light source

Cost-efficient



Large capacity



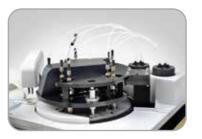
Low reagent consumption



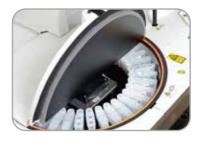
One key STAT

CL-2000i Chemiluminescence Immunoassay System

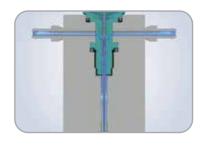




Enhanced Reaction System



Stable Reagent Cartridges Utility



Efficient Washing System

Thyroid
FT3
FT4
T3
T4
TSH
Anti-TG
Anti-TPO
Thyroglobulin (TG)
TRAB
rT3

Down's screening PAPP-A* Free β-HCG *

Infectious Disease HBsAg Anti-HBs HBeAg Anti-HBe Anti-HBc HIV combo Anti-HCV Anti-TP Anti-HBc lgM * HBeAg quantitative * Fertility Total β-HCG FSH LH Prolactin E2 E3 **TESTO** PROG Free testosterone * 17-OH PROG * SHBG *

Growth hormone hGH* IGF-1 * AMH*

Cardiac CK-MB Myoglobin Troponin I BNP Angiotensin I* Angiotensin II * Renin * Aldosterone *

Metabolic Intact PTH Calcitonin Vitamin D total Ferritin Vitamin B12 Folate **RBC** Folate Diabetes

C-peptide Others ACTH DHEA-S

Cortisol

Insulin

Liver fibrosis LN HA PIIINP CIV

* To be launched CE pending.

Tumor Marker CEA AFP CA125

CA15-3 CA19-9 FPSA **TPSA**

NSE CYFRA 21-1

CA72-4 ProGRP *

PGI PG II

SCCA * HE4 *

CA242 * CA50 *

Inflammation PCT *

IVD Product Catalog.41 IVD Product Catalog.42

CL-1000i/CL-1200i

Chemiluminescence Immunoassay System

Throughput: 120T/H 180T/H Large onboard capacity of 25 reagents 6 sample racks for loading, STAT priority Non-stop replace of reagents and consumables during testing Touch screen monitor with swing arm IVD Product Catalog.43

Simple yet Robust





A fully capable and robust immunoassay analyzer with performance consistent with CL-2000i, in a smaller benchtop package better suited for mid-to-small-sized labs. The system features a large reagent and sample capacity, robust performance and simple-to-use operation interface.



Enhanced Reaction System

4-phase magnetic separation with precisely controlled temperature Consistent performance reliability with enhanced PMT detection system Non-touch vortexer mixing for reaction solution without any contamination



Sample Handling

Samples loading and offloading continuously by sample racks
Unified sample racks with detachable adaptor
Rack status real-time indicting on lane numbers
STATs prioritized fast



Consumables Management

Random access for cuvette loading without pause or stop 88*2 cuvettes in one batch, 185 cuvettes per waste bag Cuvettes & waste bag status real-time indicating





Cost-effective



Easy maintenance



Reagent bubble detection



Lower carry over

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User-friendly interface

Accurate

- Complete metrological traceability
 Highly precision sampling
 Reagent bubble detection

Economical

- Light-spot flatting optical system- lower the reaction volume to 100μL
- Minimum sample volume:1.5μL



Intelligent

- Whole blood HbA1C testing*Advanced software
- Easy maintenance

BS-480 Clinical Chemistry Analyzer

Throughput: 400 T/H (560 T/H with ISE)
Minimum Reaction volume: 120 µl
12 wavelengths
Sample probe: Liquid level detection,
clot detection and collision pro-tection

mindray



Enhanced Liquid System



Easy to perform maintenance



Intelligent Probe System functions and smart protection



User-friendly Interface



Reflex Function



Real-time QC Status Monitoring



Test Summary





BS-380 Clinical Chemistry Analyzer

Constant 300 tests per hour, up to 450 tests per hour with ISE
Up to 58 onboard chemistries and 3 ions
On board capacity of 75 sample positions
Automatic probe cleaning, liquid level detection and collision protection 12 wavelengths
Auto washing system





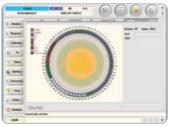
Auto washing station



Solid direct heating bath without maintenance



Independent mixing bar



Monitoring of real-time statues



Editable report form



Refrigerated reagent disk

BS-240Pro BS-360E

Chemistry Analyzer

Compact yet Robust



Waterfall probe cleaning



Intelligent probe with optional clog detection



High throughput





Optimized washing station



Built-in barcode reader



Optional ISE module easy to access



Intuitive software with more functionalities



Up to 100 reagent positions 50 fixed + 50 interchangeable)

Considerate design
Easy loading and unloading for samples
One key calibrator import

HbA1c smart-sampling function Onboard hemolysis

atings photometer

IVD Product Catalog.51 IVD Product Catalog.52

BS-240 Clinical Chemistry Analyzer

"CUTE"Chemistry Solution





Compact:

One of the smallest 200 T/H chemistry analyzers in the market, achieving maximum space saving;

Technology: Smart-sampling technology enables automatic hemolysate preparation for HbA1c test. Pretreatment-free operation guarantees high productivity.





Large capacity of 80 reagent positions and 40 sample positions extendable to 80.

Efficient:

A minimum of 100µl reaction volume for reagent saving.





Step-by-step maintenance guide



Waterfall probe cleaning



Independent mixing bar



Built-in barcode reader



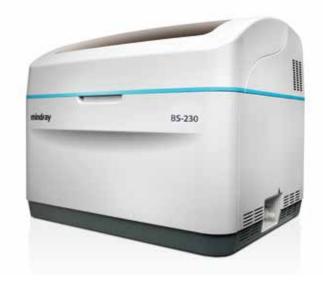
Intelligent software with user-friendly interface Compact Size with Robust Functions

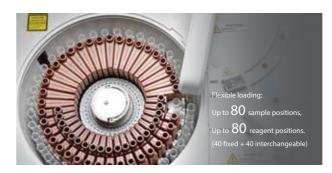
BS-240



BS-230 Clinical Chemistry Analyzer

BS-230 is a multi-functional benchtop clinical chemistry analyzer with a throughput at 200 T/H. Though with a compact size, it has achieved a host of advanced functions never before found on a like product in the market, making it an optimal chemistry solution for small laboratories and a back-up tool for mid-to-high end laboratories.











BS-200E Clinical Chemistry Analyzer

Smart, Versatile, Easy

mindray

Intelligent collision protection

Vertical & horizontal collision Audible alarm Ensure operator safety



Effective liquid level detection Liquid level tracking Prevent short sampling

Semi-permanent cuvettes

Lower consumable cost Easy replacement Durable material, long lasting

Reagent and sample cooling compartment

2~12°C continuous cooling Enhance reagent and sample stability

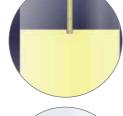
Highly compatible reagent system

Reagents, QC and CAL Metrological traceability



85-200E











Grating optic system 12 Wavelengths; up to 800nm

Reversed optics Accomodate most chemistry assays



8-step washing station

Enable lengthy operator walk-away time High quality cuvette washing Ensure optimal cleaniness with pre-heated detergent and water



Standalone mixing bar

Effectively minimizes potential carry-over Innovative design Minimal maintenance; simple installation



150 μl minimum reaction volume

Lower reagent consumption Long term saving on reagent cost



3-channel integrated ISE module

Na+, K+, Cl- electrodes Durable assemble Highly efficient electrolytes analysis

BS-200

Clinical Chemistry Analyzer

200 T/H throughput
Independent mixing bar
40 positions for sample and reagent respectively
Disposable cuvette
8 wavelengths
Liquid level detection & collision protection,
automated probe clean



BS-120 Clinical Chemistry Analyzer

100 T/H throughput
Independent mixing bar
Flexible configuration for sample/reagent positions
External bar code reader (optional)
Disposable cuvette





Disposable cuvette



Independent mixing bar



MR-12A

Microplate Washer

Wash programs up to 100 Wash cycles 0 to 9

Dispensing volume 50 up to 3000 μL

Bottom collosion protection automatic Residual volume per well $< 2 \, \mu L$

Soaking time 0 to 300 seconds
Shaking time 0 to 300 seconds

Mutiple options 1 x 8, 1x 12

Standard bottle set 2 x 2L (detergent), 1 x 2L (Waste)

1 x 2L (distilled water)

Power supply AC 100-240V, 50/60Hz

Temperature $5^{\circ}\text{C}\sim35^{\circ}\text{C}$ Humidity $15\sim85\%$

Dimension 400mm (L) x 330mm (W) x 145mm (H)

Weight 7.2 Kg







MR-96A

Microplate Reader

Detection method Absorbance
Microplate types 96/48-well plate

Reading speed 5 sec single wavelength, 12 sec double

wavelength

Wavelength range 400~700nm

Measurement system 8-channel optical system

Light source Halogen-tungsten
Reading range 0.001~3.500 Abs
Measurement range 0.001~2.500 Abs
Photometric accuracy 0~0.2 A 0.001 Abs

Wavelength accuracy ± 2 nm Repeatability < 1%

Stability < 0.005 Abs / 10 min

Linearity 0~1.5 A < 1.0%

Filters 405nm, 450nm, 492nm, 630nm

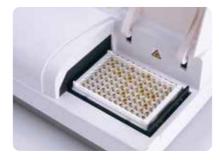
Connection port 1 x RS232, 2 x USB

Shaking variable speed and time shaking modes

Input Touch screen

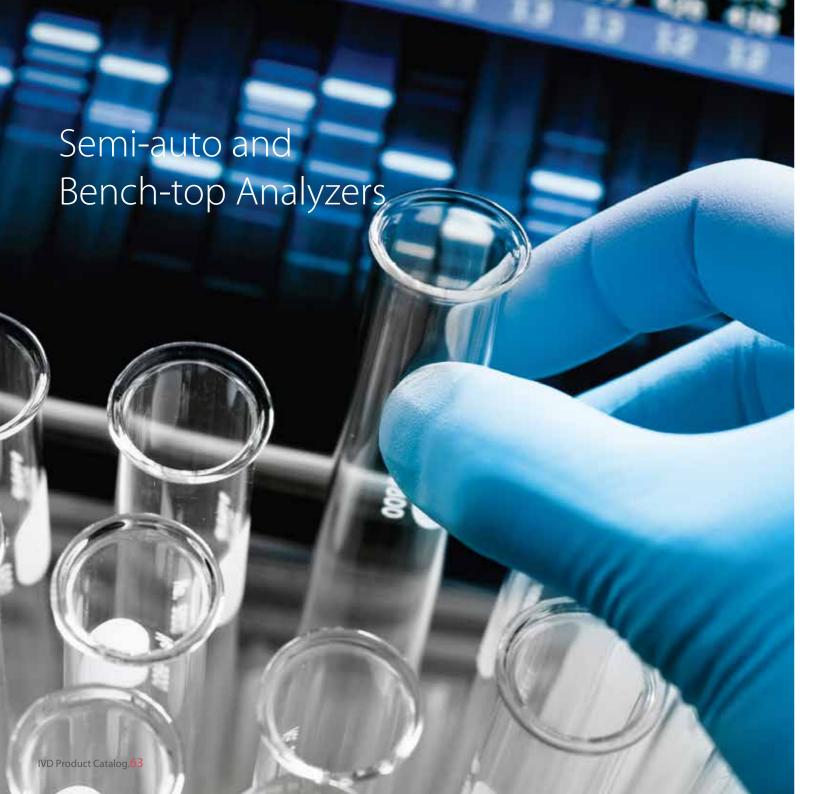
Display Large color LCD display
Size 437mm x 332mm x174mm

Weight 8.5 Kg









BA-88A Semi-Auto Chemistry Analyzer

Endpoint, Fixed-time, Kinetics and Absorbance
Wavelengths range 340 to 670nm
7.0" TFT touch screen & popup keypad
External keyboard and mouse support via USB
Up to 200 tests can be programmed
Testing modes: flowcell and cuvette
User-friendly interface
Power-failure protection
Universal power supply











Modular System

Hepatic	Renal	Cardiac	Inorganic &Anemia	Lipid	Immune protein	Diabetes	Rheumatism	Pancreatitis	Lung
ALT	CREA	CK	Mg	TC	C3	Glu	RF	AMY	ADA
AST	UREA	CK-MB	Р	TG	C4	HbA1C	ASO	LIP	ACE
GGT	UA	a-HBDH	Ca	HDL-C	IgA	β-НВ	CRP		
ALP	CO2	LDH	FER	LDL-C	IgG	FUN			
ALB	Cys-C	HS-CRP	Fe	Apo-A1	IgM				
TP	β2-MG	MYO	UIBC	Аро-В	IgE				
PA	RBP	D-Dimer	TRF	Lp(a)					
TBA	MALB		G6PD						
CHE	TPUC								
BIL-T									
BIL-D									
AFU									

IVD Product Catalog.66

HbA1C

ADA (American Diabetes Association) Endorses HbA1c for Diabetes Diagnosis



Advantages

Enzymatic method

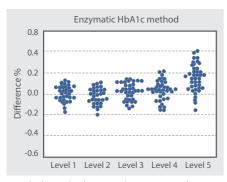
Wide measuring range:3~16%

Excellent sensitivity: Hb (15 µmol/L) , HbA1C (3 umol/L)

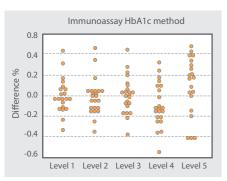
Excellent precision with intra CV value < 2.0%

Traceability to IFCC/NGSP/JCCL reference methods

Precision Contrast

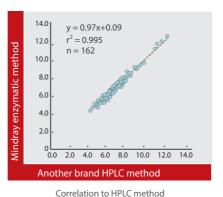


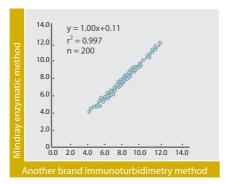
The bias value between the enzymatic HbA1c test results and the stated value : $-0.2 \sim 0.4\%$



The bias value between the immunoassay HbA1c test results and the stated value : -0.5 \sim 0.6%

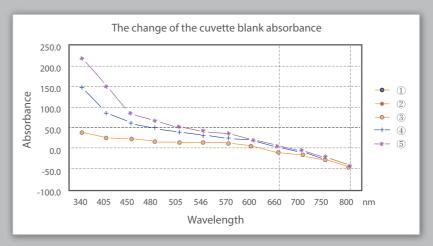
Method comparison





Correlation to immunoturbidimetry method

Reagent contamination



Sampl①: 0.9% saline Sampl②: hemolysis solution Sampl③: hemolysis solution + enzymatic HbA1c rea

International standardization

International standardization certificates of HbA1c from NGSP More information refers to webstie.(http://www.cdc.gov) NGSP(National Glycohemoglobin Standardization Program)









β-HB (β-Hydroxybutyrate)

ADA (American Diabetes Association) Endorses β -HB for diagnosing and monitoring ketoacidosis

Enzymatic Colorimetric Method

Liquid ready-to-use reagent Enzymatic Colorimetric Method for the measurement of β-Hydroxybutyrate, making automation easier Wide measuring range with 0.03~5.5 mmol/L Excellent sensitivity with minimal detection level

To test β-Hydroxybutyrate – the major ketone in the blood, making it a very reliable test

Measurement of ketones in serum rather than in urine helps eliminate the risk of false negatives due to insensitivity and false positives due to drug interference

Traditional diagnostic method

Sodium nitroprusside reaction(urine strip or tablet)

Qualitative result

False-positive results (Sulfhydryl drugs, including the ACE inhibitor captopril), false-negative results (High dosage of Vitamin C) Not early period diabetic ketoacidosis diagnosis, for not testing β-HB Misleads doctors for the increasing acetoacetate during treatment (β-HB oxidized into acetoacetate)

SHENDER MONDANT RIGHTED MEDICAL TO BE THE OWNER THE COLUMN

ADA (Adenosine Deaminase)

An Ideal Biomarker For Tuberculosis Screening

Advantages

High sensitivity: Measured Low limit of detection 1U/L

Wide linearity range: Measured 1~200 U/L

Excellent precision with low CV value.

Strong anti-interfering ability for lipemia, bilirubin, hemaglobin and ascorbic acid Good correlation to reference method

Calibrators standardized to International Reference Material ERM-AD455/IFCC



Comparison ADA assay with prevalent method

Interferon-y Release Assays

Manual Operation

16-24 hrs(but longer if run in batches) to get results



mix tubes thoroughly after blood collection





Add 50µl of working conjugate to each well Add 50µl of plasma or standard. Incubate for 120 minutes at room temperature



at 37°C for 16~24 hours



wash plate ≥6times. Add 100ul of substrate. Incubate 30 minutes at room temperature





Add 50µl of stop solution. Read absorbance at 450nm



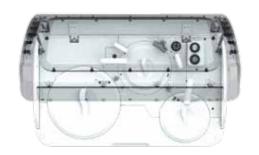
centrifuge tubes at 2000~3000g (PCR) for 15 minutes



Calculate results using Analysis

Automatic chemistry method Rapid test Cost effective Simple operation

Adenosine deaminase Assay





Polymerase Chain Reaction(PCR)

Very expensive Complicated operation

as 0.03mmol/L

G6PD (Glucose-6-phosphate Dehydrogenase)

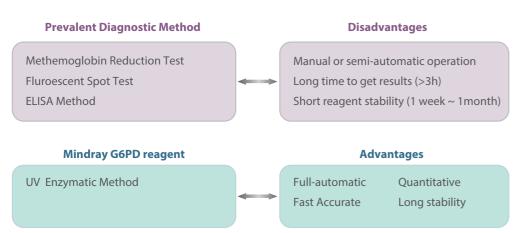
An important parameter for G6PD deficiency screening

Advantages

- Liquid reagent, ready to use
- Wide linearity range: 0~3000 U/L
- Excellent precision.
- Excellent on-board stability: 21 days.
- Long shelf life: 15 months.
- The sample type is the backlog red blood cells.
- There is no interfering for lipemia, bilirubin, drugs and so on.



The comparison with prevalent methods



AFU (α -L-fucosidase)

A sensitive marker for diagnosing hepatocellular carcinoma (HCC)

Advantages

- Liquid reagent, ready to use
- High sensitivity and wide linearity range
- Excellent precision with CV< 2%
- Excellent stability
- Strong anti-interfering ability of ascorbic acid and intra-lipid.
- Calibrators standardized to International Reference Material ERM-AD455/IFCC.



The combined detection of AFU and alpha-fetoprotein (AFP) is better than AFP individual detection

- The combination test of AFP & AFU enzyme increases the diagnostic accuracy to 90% inspite of AFP alone.
- About58% patients with HCC negative for AFP could be diagnosed.
- In the HCC patients with tumor size < 3 cm, the concentration of AFP is very low and some of the results were negative. AFU is a good marker than AFP in the detection of early HCC.

Sensitivity	Accuracy
52%	74%
70%	78%
80%	90%
	70%

IVD Product Catalog. 72



TDR-300B Plus

Microorganism Analysis Systems

Microorganism analysis systems

Combo test cards offer much easier test for identification

and susceptibility testing

Identification range

10 categories of test cards covering Enterobacteriaceae, Micrococcaceae,

Streptococcus,

Yeast-like fungi, Vibrionaceae, Non-fermentative bacteria, Bacillus,

Coryneform bacteria,

Neisseria, Haemophilus and other fastidious bacteria, Anaerobes etc

Test cards

Combo ID+AST 96 wells; AST only 96 wells

Principles

Identification: colorimetry

Antimicrobial susceptibility testing: turbidimetry

Printer

External printer

Interface

RS-232, support LIS/HIS

Self-definable susceptibility test card

Advanced expert system and simple WHONET exporting function.

Turbidimeter and automated inoculator are optional









状态 结果 IVD Product Catalog. 75

TDR-X series Automated Blood Culture Systems







Sample position: 120, 60, 20

Principle: colorimetry

Sensitivity: ≤10 CFU/ml

Culture type: TDR Resin Aerobic;
TDR Resin Peds; TDR Resin Anaerobic

Extendable Function: Maximally extend to 600 position

Powerful statistics: Export results including bacteria growth curve

Full automation: Automatic surveillance and report (negative and positive results)

Temperature controlling system: Dual heating systems (solid heating bath and air heating bath)





C2000-2/4 Semi-Auto Coagulation Analyzer

Testing principle: mechanical

Testing items: PT, APTT, FIB, TT etc clotting items Reportable unit of PT: sec, Ratio, INR, %, %-INR

Reagent position: 3/4 Incubation position: 6/16 Measuring channel: 2/4

Built-in printer (C2000-2/4) Electronic Start-Pipette





C2000-2 C2000-4

IVD Product Catalog.78

C3100 Auto Coagulation Analyzer



Testing principle: mechanical

Testing items: PT, APTT, FIB, TT etc clotting items;

D-D, FDP etc immunoturbidimetric items

Throughput: up to 200 tests/hour

11 Reagent positions (2 with stirring function)

61 Sample positions

12 Incubation channels

4 mechanical testing channels + 1 optical channels (575nm)

Cuvettes loading: 1,000 cuvettes autoloading

Automatic sample dilution, auto rerun.



C3510 Auto Coagulation Analyzer

Testing principle: mechanical

Testing items: PT, APTT, FIB, TT etc clotting items; D-D,

FDP etc (immunoturbidimetric assay); AT ${\mathbb H}$ etc (chromogenic substrate assay)

Throughput: 300 tests/hour

Reagent position: 28

Sample position: 80

Incubation channel: 16

Testing channel: 4 mechanical + 6 optical channels (5 at 575nm, 1 at 405nm)

Cuvettes loading: 1,000 cuvettes autoloading

Automatic sample dilution, auto rerun.

IVD Product Catalog. 79



EH-2080B/C

Fully Automated Urine Sediment Analysis System

 ${\it Classical\ morphology\ detection,} provide\ whole\ view\ field\ microscopic\ image$

Machine vision(MV) applied with DIF and CPTR technology

Reportable Parameters including different types of formed elements in urinary sample

Both native urine sample and sediment sample can be tested

Throughput upto 80T/H(EH-2080B) or 100T/H(EH-2080C)

Walk-away automation,100 samples constant random access with barcode scan Efficient self-maintenance system including automatic counting chamber cleaning and probe washing



EH-2050B Plus

Fully Automated Urine Sediment Analysis System



Classical morphology detection, provide whole view field microscopic image Machine vision(MV) applied with DIF and CPTR technology

Reportable Parameters including different types of formed elements in urinary sample

Native urine sample

Throughput upto 80T/H(EH-2050B Plus)

Walk-away automation, 20 samples alternate loading

Efficient self-maintenance system including automatic counting chamber cleaning and probe washing

EH-2030

Fully Automated Urine Sediment Analysis System



Classical morphology detection, provide whole view field microscopic image Machine vision(MV) applied with DIF and CPTR technology
Reportable Parameters including different types of formed elements in urinary sample
Native urine sample
Throughput: 40T/H on average
Open vial and efficient self-maintenance system

UA-600T Urine Analyzer

600 strips per hour
Touch screen interface
Cold light source with luminosity
Automatic detection of strip placing and testing
Automatic used strip collection
Built-in thermal printer and interface for external printer
Storage of 2000 test results



UA-600 Urine Analyzer

600 strips per hour

Cold light source with luminosity

Automatic detection of strip placing and testing

Autometic used strip collection

Built-in thermal printer and interface for external printer

Storage of 2000 test results



UA-66 Urine Analyzer

Cold light source with high luminosity, long shelf life
Innovative light sensor, high sensitivity
Automatic calibration improves accuracy
Standard RS-232 interface for connection with external computer
Storage of 1000 test results
Built-in thermal printer



U-11 Urinalysis Strips

Urobilinogen, Bilirubin, Ketone, Blood, Protein, Nitrite, Leukocytes, Glucose, Specific Gravity, Ascorbic Acid, PH



IVD Product Catalog.83