Technical Specifications

System function

Automatic, Discrete, Random Access, Bench-top
STAT sample priority

Throughput:	Constant 240 photometric tests per hour, up to 400 T/H with ISE
Measuring principles:	Absorbance photometry, turbidimetry, ion selective electrode technology
Methodology:	End-point, Fixed-time, Kinetic, optional ISE, Single/Double reagent chemistries, Mono-chromatic / bi-chromatic

Original system pack reagent ready to use
Close system and open system is optional

Reagent/Sample Handling

Reagent/Sample tray:	50 to 100 positions for reagents and 50 to 100 positions for samples in 24-hour refrigerated compartment (2~12℃)
Reagent volume:	R1: 100~200μL, step by 0.5μL R2: 10~200μL, step by 0.5μL
Sample volumne:	2~35μL, step by 0.1μL
Reagent/Sample probe:	Liquid level detection, horizontal and vertical collision protection, inventory checking, reagent pre-warming, optional clog detection
Probe cleaning:	Automatic washing for interior and exterior Carry over < 0.05%
Automatic sample dilution:	Pre-dilution and post-dilution
Mixing Unit:	Independent mixing bar

Built-in Bar Code Reader (Optional)

Used for sample and reagent programming
Be applicable to various bar code systems of Codabar, ITF (Interleaved Two of Five), code128, code39, UPC/EAN, Code93
Capable to communicate with LIS in bi-directional mode

Reaction System

Reaction tray:	80 reusable cuvettes
Reaction volume:	100~360μL
Reaction temperature:	37℃ ± 0.1℃ by air bath
Cuvette Washing:	Washing station with pre-warmed detergent and de-ionized water

ISE Module (optional)

Direct method, measuring K+, Na+, Cl-

Optical System

Light Source:	Halogen-tungsten lamp
Wavelength:	12 wavelengths, 340nm, 380nm, 412nm, 450nm, 505nm, 546nm, 570nm, 605nm, 660nm, 700nm, 740nm, 800nm
Absorption range:	0~3.5Abs, resolution 0.0001Abs
Stray Light:	4.9Abs

Control and Calibration

Calibration modes:	K factor, Linear (two points and multi-points), Logit-Log 4P, Logit-Log 5P, Spline, Exponential, Polynomial, Parabola, Logit-Log3P, Broken line One key calibrator import function
Control Rules:	Westgard multi-rule, Levey-Jennings, Cumulative sum check, Twin plot

Operation Unit

Operation system:	Windows 10
Interface:	RS-232

Working Conditions

Power Supply:	200~240V, 50/60Hz, ≤1300VA or 100~130V, 60Hz, ≤1300VA
Dimension:	860 mm (length) × 660 mm (depth) × 550 mm (height)
Weight:	115 kg
Water Consumption:	≤6.5 L/H

www.mindray.com

P/N:ENG-BS-240E-210285X8P-20171017

mindray
healthcare within reach

mindray

BS-240E

Chemistry Analyzer

Compact yet Robust

Large and flexible capacity

Up to 100 sample positions

Up to 100 reagent positions

(50 fixed + 50 interchangeable)

Gratings photometer

100μL minimum reaction volume

A Whole New Generation

with constant throughtput of 240 photometric T/H

Considerate design

Easy loading and unloading for samples

One key calibrator import

HbA1c smart-sampling function

Onboard hemolysis

BS-240E

Chemistry Analyzer

Independent mixing bar

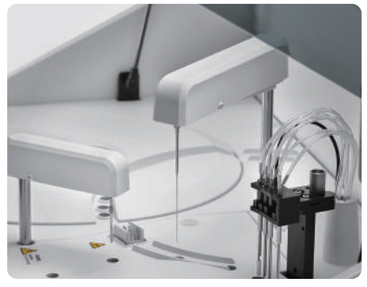
Optimized washing station

Waterfall probe cleaning

Built-in barcode reader

Intelligent probe with optional clog detection

Optional ISE module easy to access



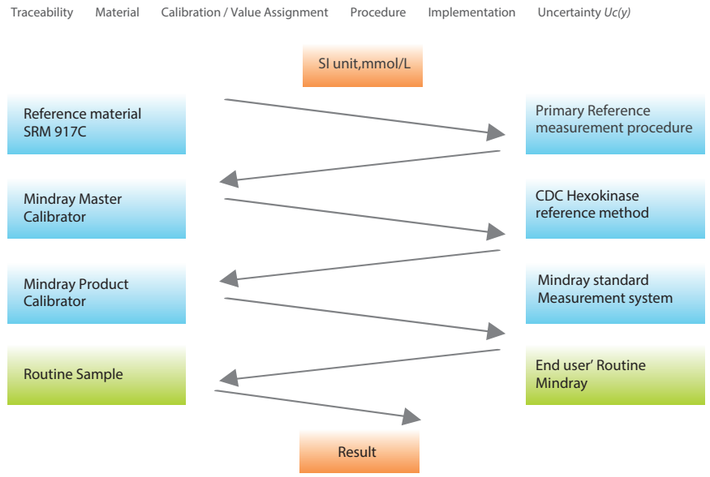
Constant throughput

Intuitive software with more functionalities

Complete traceability process

Complete calibration hierarchy and traceability chain are based on ISO standard (EN/ISO17511) from reference system to routine measurement system.

Traceability chain of Mindray measurement system (Glu)

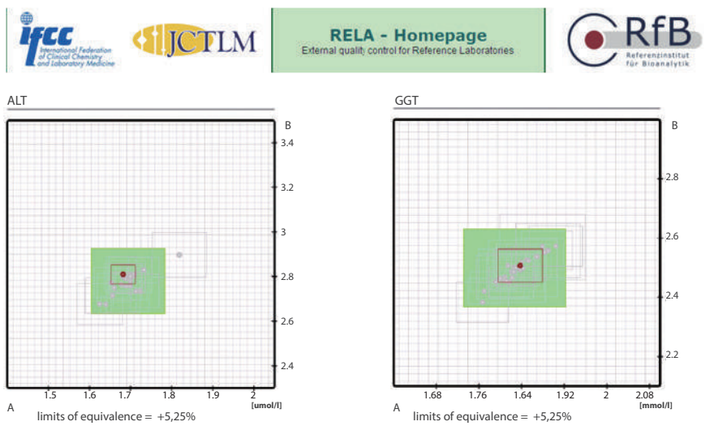


External quality assurance for reference measurement

Mindray participates in RELA (External quality control for reference laboratory).

EQA for Mindray Reference laboratory——RELA

Mindray reference laboratory has passed RELA for 6 consecutive years.



More RELA results please refer to: www.dgkl-rfb.de/81

RELA

All the items Mindray participate RELA

ALT AMY ALP CK GGT GLU LDH TB TP UA UREA

Reagent menu

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)

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)

Immune Panel

- Immunoglobulin A (IgA)
- Immunoglobulin G (IgG)
- Immunoglobulin M (IgM)
- Complement C3 (C3)
- Complement C4 (C4)

Diabetes Panel

- Glucose (Glu) GOD-POD Method
- Glucose (Glu) HK Method
- Hemoglobin A1c (HbA1c)
- Fructosamine (FUN)
- β-Hydroxybutyrate (β-HB)

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)

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))

Rheumatism Panel

- C-reactive Protein (CRP)
- Rheumatoid Factor (RF)
- Antibodies Against Streptolysin O (ASO)

Lung Panel

- Adenosine Deaminase (ADA)
- Angiotensin Converting Enzyme (ACE)

Pancreatitis Panel

- α-Amylase (α-AMY)
- Lipase (LIP)