

M1000

Chemistry and Immunoassay Integrated System

Sample delivery module

Sample loading:	Up to 580 samples at one time
Sample offloading:	Two sample trays at one time, up to 300 samples
Loading ways:	Continuous loading by sample rack, STAT priority
Throughput:	Up to 1,000 tubes/hour; decapping at a speed up to 550 tubes/hour
Sample tube types:	68.5 mm-100 mm in length; 12-16 mm in diameter
Micro tubes:	14x25mm, 0.5mL & 14x25 mm, 2mL (Beckman cups) 12x37 mm, 2 mL (Hitachi)

Chemistry Analyzer

Description:	Chemistry analyzer with photometric testing and ISE testing capabilities
Throughput:	2,000 photometric tests/hour, up to 2,400 tests/hour including ISEs
Measuring principles:	Colorimetry, Turbidimetry and Indirect ISE methods
Methodology:	End-point, Fix-time, and Kinetic; with support for three/four-reagent tests
Reagent handling:	144 positions, up to 69 onboard tests; onboard continuous loading; dedicated PAD control and daily intelligent forecast
Sample handling:	Ultrasonic washing of sampling probes; clot detection, auto dilution and auto rerun
Reaction system:	Permanent glass cuvettes with 9-stage auto washing; PDR grating platform by 16wavelengths; reaction volume from 80uL-280uL; lamp with a service life up to 2,400 hours
Serum index:	Quantitative of analysis of hemolysis, icterus, and lipemia; auto links affected assays
Powerful function:	Whole blood HbA1c tests; Intelligent DI water quality, air pressure and CO2 detection and auto data correction; auto maintenance

Chemiluminescence Immunoassay Analyzer

Throughput:	Up to 500 tests/hour
Description:	Micron superparamagnetic particles platform with alkaline phosphatase (ALP) labeled reagents and AMPPD
Sample probe:	Steel probe, liquid level detection, clot detection, horizontal and vertical collision protection
Sample dilution:	Auto dilution at a ratio ranging from 1:2 to 1:80
Reagent disc:	36 reagent positions, continuous loading, real-time mixing for magnetic particles
Reagent probe:	Steel probe with liquid level detection, clot detection, horizontal and vertical collision protection capabilities
Separation assembly:	4-phase magnetic separation
Mixing unit:	Non-touch vortexer mixing & ultrasound mixing

Module Size (W*D*H)

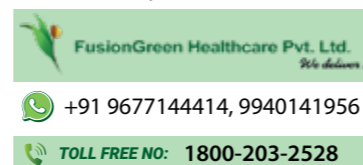
Sample processing module:	850x1150x1000 mm
Chemistry module:	1600x1150x1300 mm
Immunology module:	1455x1150x1180 mm

Operating conditions

Noise:	<65 dBA
Temperature & humidity:	15-30 °C, 35-85% RH
Altitude:	-400 to 4000 m



Marketed By:



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mindray
healthcare within reach

M1000

Chemistry and Immunoassay Integrated System

Expanding your possibility
with just **4.5m²**



M1000

Chemistry and Immunoassay Integration System

M1000 is a chemistry and immunoassay integrated system specially designed for large-scale laboratories. It supports loading up to 580 samples continuously at one time and decapping samples automatically. It is powered by many innovative technologies, such as sample tube automatic decapping, 360-degree sample barcode scanning, PDR optical platform, HILL SI solution, timely environment pressure and CO2 monitoring, VU-Mix and FS-sampling, whole blood HbA1c with auto sample increment tests and ect. All these technologies help deliver high working efficiency and deliver high quality patient reports in a short turn-around time (TAT).

High quality integration

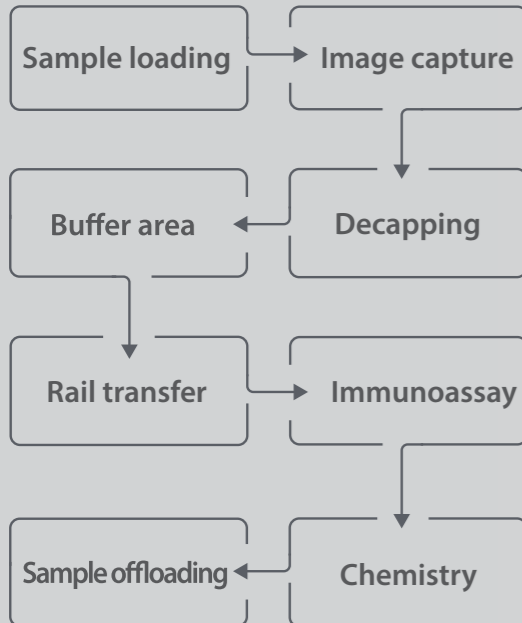
- High throughput per m², space-saving
- One sample tube for both chemistry and immunoassay tests

High speed decapping

- Onboard auto decapping, UV disinfection
- 360 degree scanning

High resolution recognition

- Freely load different type of tubes
- Sample auto capture and record by high resolution camera



High Quality Integration

Chemistry Analyzer

- **PDR™** Optical platform
- **Usonicwash™** Ultrasonic wash

Chemiluminescence Immunoassay Analyzer

- **U-Mix™** Mixing technology
- **FS-Sampling™** Accurate sampling

Sample delivery module

- Automatic decapping, visual recognition
- Intelligent sample scheduling



Takes up only 4.5 m² of space, offering a throughput of 640 T/H per m²



High quality integration for reliable and accurate results



Well-balanced load, one tube for both CC and IM tests
One person for one system



UV lamp goes off automatically when the side door is open

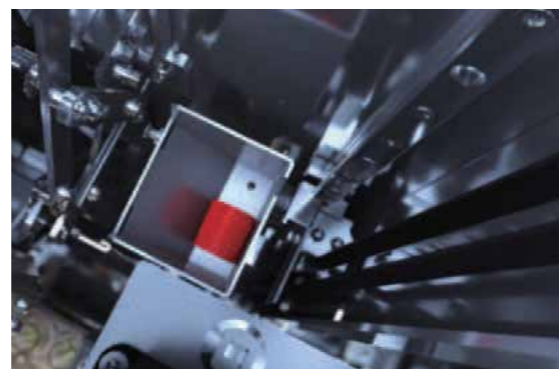
High speed decapping



Up to 550 tubes/hr



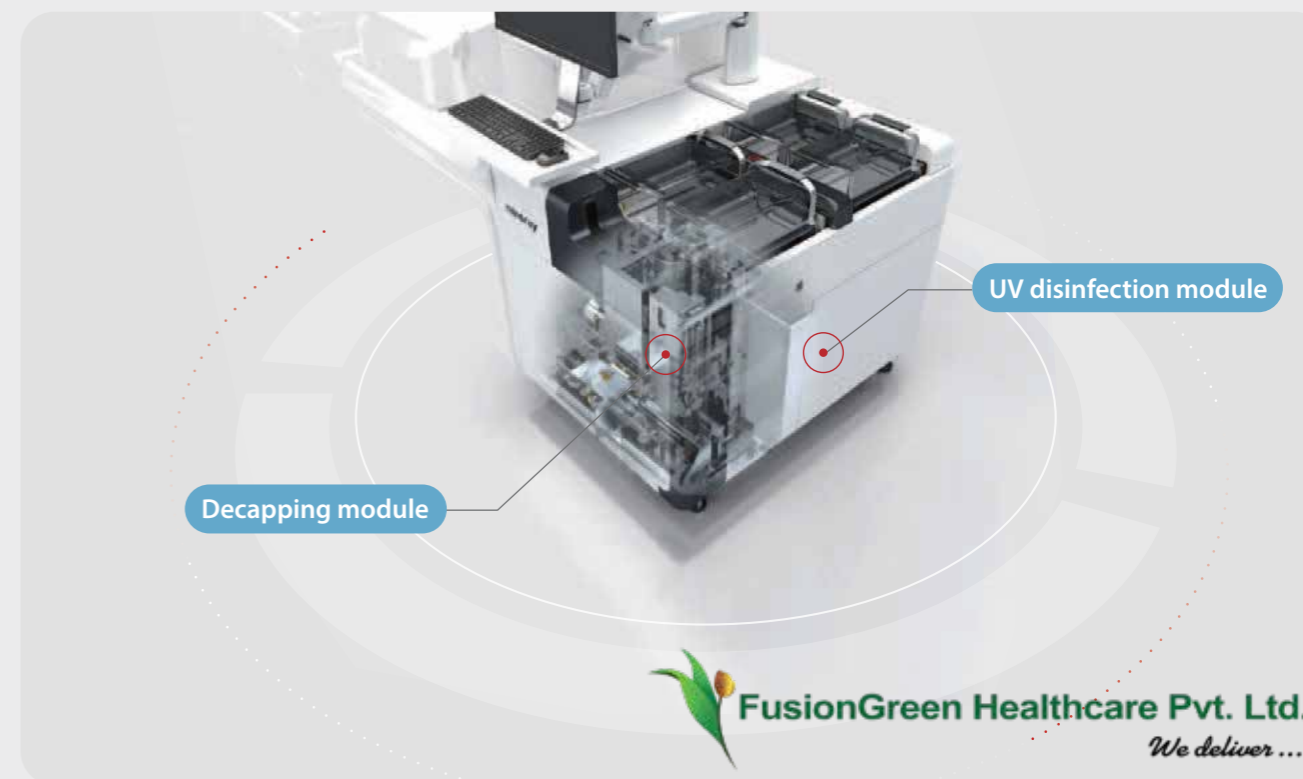
UV disinfection ensures lower biohazardous risks

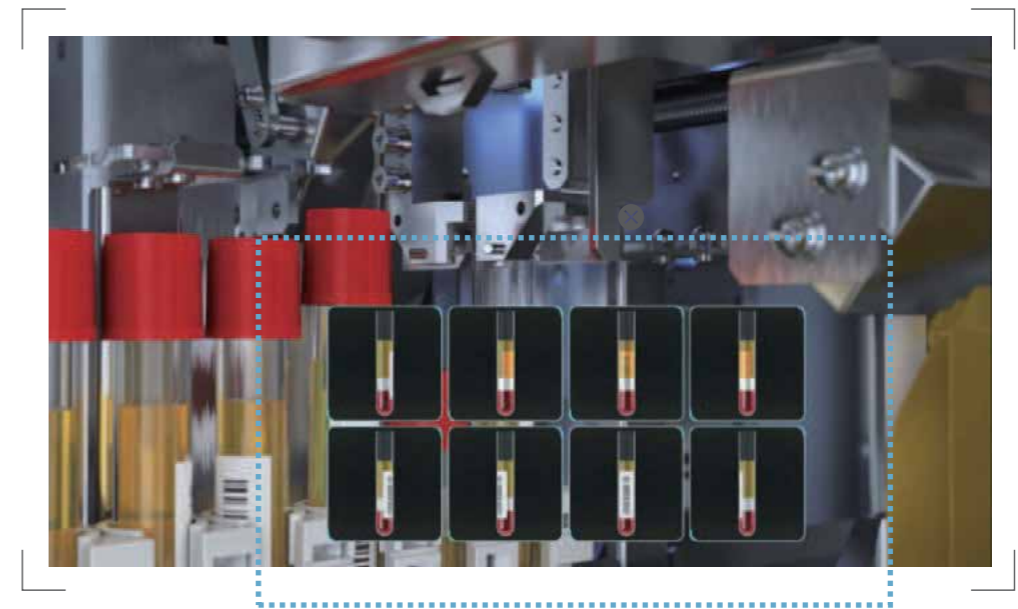


The innovative sample processing system allows onboard decapping at a variable speed to decrease aerosol, and onboard UV disinfection to avoid biohazardous risks.



Hidden design for decapping and UV disinfection inside the sample processing module, takes up no extra space



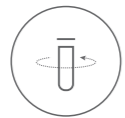


- During 360-degree scanning, a high-resolution camera automatically takes pictures of samples, which can be reviewed at any time later to provide references for report audit

High resolution identification

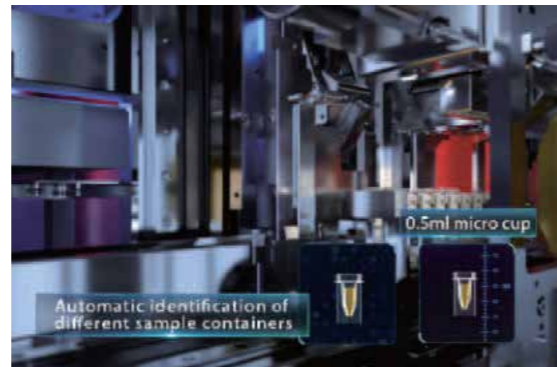


Supports loading different types of tubes at one time



Supports 360-degree rotary sample scanning

- The Visual recognition function supports loading samples of different sizes and types at one time
- Automatically different size and types of samples by the height of sample tubes
- 360-degree sample scanning and automatic sample capturing and recording by a high-resolution camera



Sort	Sample ID	Code	P	Status	Finish time	Convey	Sort	Item	Result	Dilution times	Mark	Unit
Normal	1001	321934232456789	N0001-1	Apply	10:30:15	Y	Serum	L	N			
Normal	0113	321934232456789	N0001-3	Apply	10:30:15	Y	Serum	H	++++			
Normal	0114	321934232456789	N0001-2	Done	10:30:15	Y	Arbocrit	I	N			
Urgent	0026	321934232456789	N0001-4	Apply	10:30:15	Y	Serum	0-AMY	0.5		N=	U/L
Emergency	0098	321934232456789	C0010-10	Testing	10:30:15	Y	CSF					
Normal	1005	321934232456789	N0001-6	Testing	10:30:15	Y	Serum					
Normal	1622	321934232456789	N0001-7	Testing	10:30:15	Y	Serum					
Normal	0035	321934232456789	N0001-8	Apply	10:30:15	Y	Whole blood					
Normal	1067	321934232456789	N0001-9	Sample done	10:30:15	Y	CSF					
Normal	0092	321934232456789	N0001-10	Apply for	10:30:15	Y	Serum					
Normal	0106	321934232456789	N0002-1	Sample done	10:30:15	Y	CSF					
Normal	0176	321934232456789	N0002-1	Sample done	10:30:15	Y	Serum					
Normal	0152	321934232456789	N0002-1	Apply	10:30:15	Y	Urine					
Normal	0136	321934232456789	N0002-1	Apply	10:30:15	Y	Urine					

Chemistry Assays

Hepatic Panel

- Alanine Aminotransferase (ALT)
- Aspartate Aminotransferase (AST)
- Alkaline Phosphatase (ALP)
- γ -GlutamylTransferase (γ -GT)
- Bilirubin Direct (Bil-D) DSA Method
- Bilirubin Direct (Bil-D) VOX Method
- Bilirubin Total (Bil-T) DSA Method
- Bilirubin Total (Bil-T) VOX Method
- Total Protein (TP)
- Albumin (ALB)
- Total Bile Acids (TBA)
- Prealbumin (PA)
- Cholinesterase (CHE)
- α -L-fucosidase (AFU)
- 5'-nucleotidase (5'-NT)

Inorganic & Anemia

- Iron (Fe)
- Ferritin (FER)
- Transferrin (TRF)
- Calcium (Ca)
- Magnesium (Mg)
- Phosphorus (P)
- Unsaturated iron binding capacity (UIBC)
- Glucose-6-phosphate dehydrogenase (G6PD)

DM Diabetes Panel

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

Rheumatism Panel

- C-reactive protein (CRP)
- Rheumatoid Factor (RF)
- Antistreptolysin "O"(ASO)

Renal Panel

- Urea (UREA)
- Creatinine (CREA) Modified Jaffé Method
- Creatinine (CREA)Sarcosine Oxidase Method
- Uric Acid (UA)
- Carbon dioxide (CO2)
- Microalbumin
- β 2-Microglobulin (β 2-MG)
- Cystatin C (CysC)
- Retinol binding protein(RBP)

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)]

Pancreatitis Panel

- α -Amylase (α -AMY)
- Lipase (LIP)

Cardiac panel

- Creatine Kinase (CK)
- Creatine Kinase-MB (CK-MB)
- Lactate Dehydrogenase (LDH)
- α -Hydroxybutyrate Dehydrogenase(α -HBDH)
- High sensitive C-reactive protein(HS-CRP)
- Homocysteine (HCY)
- Myoglobin(MYO)
- D-Dimer(D-Dimer)

Immune Panel

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

Lung Panel

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

Immunoassay Assays



*: Under development
**: Non-CE