

**mindray**

## CL-1200i

Chemiluminescence Immunoassay System

# Simple yet Robust







# CL-1200i

Chemiluminescence Immunoassay System



## 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

# Simple yet Ro



## Sample & Reagent Probe

Precisely controlled syringe motors offer high precision aspiration

Intelligent liquid level detection, clot detection, vertical and horizontal collision protection

Efficient interior & exterior probe wash with high pressure wash buffer

Programmable enhanced probe wash with detergent



## Sample Handling

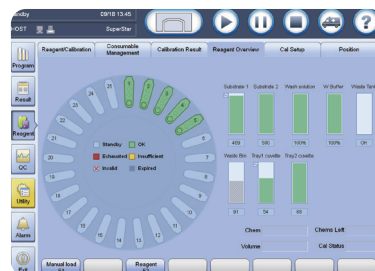
Samples loading and offloading continuously by sample racks

Unified sample racks with detachable adaptor

Rack status real-time indicating on lane numbers

STATs prioritized fast

# bust



## Intuitive Software Interface

Unified software interface, significantly reduces training effort  
Smooth interchange by intuitive software navigation  
Easy access to touch screen monitor with swing arm (optional)



## Consumables Management

Random access for cuvette loading without pause or stop  
88\*2 cuvettes in one batch, 200 cuvettes per waste bag  
Cuvettes & waste bag status real-time indicating



## Reagent & Substrate Handling

Easy for reagent & substrate handling, liquid reagents ready-to-use  
2°C~8°C non-stop refrigerated reagent carousel featured 25 positions  
Same reagent pack size with CL-2000i (50 tests/100 tests per pack)  
Reagents stable on board for up to 56 days

## Test Menu

### Thyroid

FT3  
FT4  
T3  
T4  
TSH  
Anti-TG  
Anti-TPO  
Tg  
rT3  
TRAB\*

### Infectious Disease

HIV Combo  
HBsAg  
Anti-HBs  
HBeAg  
Anti-HBe  
Anti-HBc  
Anti-HCV  
Anti-TP (Syphilis)  
HBeAg quantitative\*  
Anti-HBc IgM\*

### Fertility

Total  $\beta$ -HCG  
FSH  
LH  
Prolactin  
E2  
E3  
TESTO  
PROG  
Free testosterone\*  
17-OH PROG\*  
SHBG\*  
AMH\*

### Tumor marker

CEA  
AFP  
CA125  
CA15-3  
CA19-9  
FPSA  
TPSA  
NSE  
CYFRA 21-1  
CA72-4  
PG I  
PG II  
SCCA  
HE4  
ProGRP  
CA50  
CA242

### Bone Metabolic

Intact PTH  
Calcitonin  
Vitamin D total

### Cardiac

CK-MB  
Myoglobin  
Troponin I  
BNP

### Diabetes

Insulin  
C-peptide

### Adrenal Function

DHEA-S  
Cortisol  
ACTH

### Liver Fibrosis

LN  
HA  
PIIINP  
CIV

### ToRCH

Toxo IgG\*  
Toxo IgM\*  
Rubella IgG\*  
Rubella IgM\*  
CMV IgG\*  
CMV IgM\*  
HSV-1/2 IgG\*  
HSV-1/2 IgM\*  
HSV-1 IgG\*  
HSV-2 IgG\*

### Anemia

Ferritin  
Vitamin B12  
Folate  
RBC Folate

### Hypertension

Angiotension I\*  
Angiotension II\*  
Renin  
Aldosterone

### Growth Hormone

hGH\*  
IGF-1\*

### Inflammation

PCT

### DS' Screening

PAPP-A\*  
Free  $\beta$ -HCG\*

\*: in development

## Technical Specifications

### General Information

Throughput	Up to 180 tests/hour
Measurement Principle	Micron superparamagnetic particles platform with alkaline phosphatase (ALP) labeled reagents and AMPPD substrate

### Sample Assembly

Sample Feeder	Continuous sample loading and offloading by sample racks
Sample Rack	10 positions per rack, same as BS-800/BS-2000/CL-2000i series
Sample Capacity	Up to 60 samples in one batch
Sample Probe	Steel probe, liquid level detection, clot detection, horizontal and vertical collision protection
Sample Volume	10 $\mu$ l~200 $\mu$ l, with increment of 1 $\mu$ l
Sample Dilution	Automatic dilution with 1: 2 ~ 1: 80

### Reagent Assembly

Reagent Disk	25 reagent positions, continuous loading, real-time mixing for magnetic particles
Cooling System	2°C~8°C
Reagent Pack	50 tests per pack, 100 tests per pack
Reagent Scanning	Built-in/external bar code reader scanning
Reagent Probe	Steel probe, liquid level detection, bubble detection, horizontal and vertical collision protection
Reagent Volume	20 $\mu$ l~200 $\mu$ l, with increment of 1 $\mu$ l

### Substrate System

Substrate Bottle	300/500 tests per bottle, bottom piercing
Substrate Loading	Capable of continuous loading during testing
Substrate Heating	Constant heating
Aspiration Volume	200 $\mu$ l

### Magnetic Separation Unit

Separation Assembly	4-phase magnetic separation
Temperature	Accuracy: 37 $\pm$ 0.3°C, fluctuation: $\pm$ 0.2°C

### Measurement and Reaction System

Detection Mode	Photon counting
Signal Detector	Photomultiplier (PMT) photon counter
PMT Calibration	LED reference module
Reaction Carousel	75 positions
Temperature	Accuracy: 37 $\pm$ 0.3°C, fluctuation: $\pm$ 0.2°C
Mixing Unit	Non-touch vortexer mixing

### Cuvette Loading and Waste Collection

Cuvette	Disposable plastic cuvette
Cuvette Loading	88 cuvettes per tray, two trays can be loaded in one batch, continuous loading and offloading
Waste Collection	Waste container, 185 cuvettes per box

### Working Conditions

Power Supply	110V/115V~, 60Hz; 220V-240V~, 50Hz; 220V/230V~, 60Hz
Input Power	2000VA
Operating Temperature	15°C~30°C
Relative Humidity	35%RH~80%RH, without condensation
Dimension	Main Unit: 1400mm*760mm*600mm (W*D*H) Weight: 225kg
Altitude Height	-400m~4000m