



# CL-1200i

Chemiluminescence Immunoassay System

**mindray**  
healthcare within reach

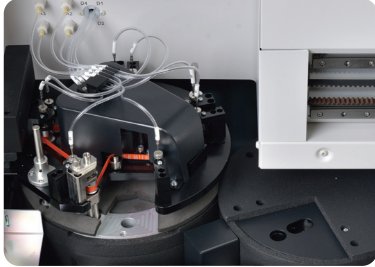


# **CL-1200i**

Chemiluminescence Immunoassay System



# Simple yet Robust



## 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 & 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

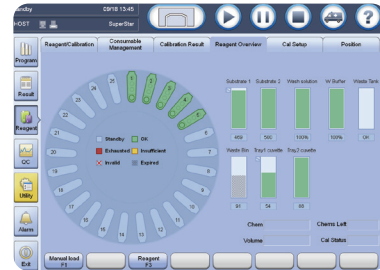


## Sample Handling

- 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

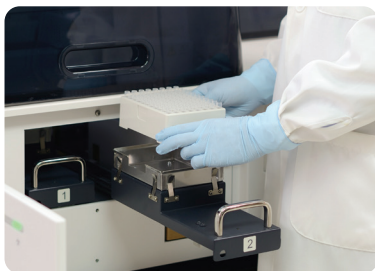


# Robust



## 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  
Thyroglobulin (TG)  
TRAB \*  
rT3

### Fertility

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

### Metabolic

Intact PTH  
Calcitonin  
Vitamin D total  
Ferritin  
Vitamin B12  
Folate  
RBC Folate

### Tumor Marker

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

### Down's screening

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

### Growth hormone

hGH \*  
IGF-1 \*  
AMH \*

### Others

ACTH  
DHEA-S  
Cortisol

### Infectious Disease

HBsAg  
Anti-HBs  
HBeAg  
Anti-HBe  
Anti-HBc  
HIV combo  
Anti-HCV \*\*  
Anti-TP  
Anti-HBc IgM \*  
HBeAg quantitative \*

### Cardiac

CK-MB  
Myoglobin  
Troponin I  
BNP  
Angiotension I \*  
Angiotension II \*  
Renin \*  
Aldosterone \*

### Liver fibrosis

LN  
HA  
PIIINP  
C IV

### Inflammation

PCT \*

\*To be launched \*\* CE Pending

# CL-1200i

## Chemiluminescence Immunoassay System

### 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)<br>Weight: 225kg |
| Altitude Height       | -400m~4000m                                            |

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