

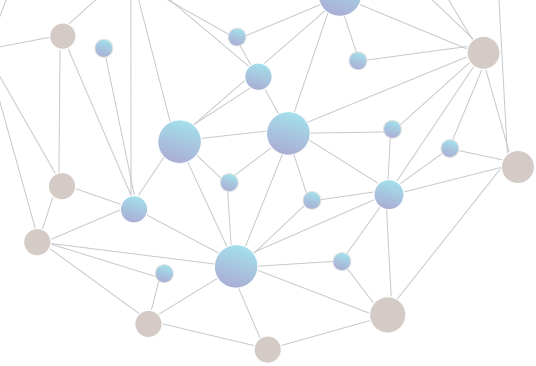
# MAGLUMI® X3

Fully-auto Chemiluminescence Immunoassay (CLIA) System



## Save Your Space without Compromise

Powerful Performance and Compact Design  
Compatible with Small and Medium-sized Hospitals and Labs

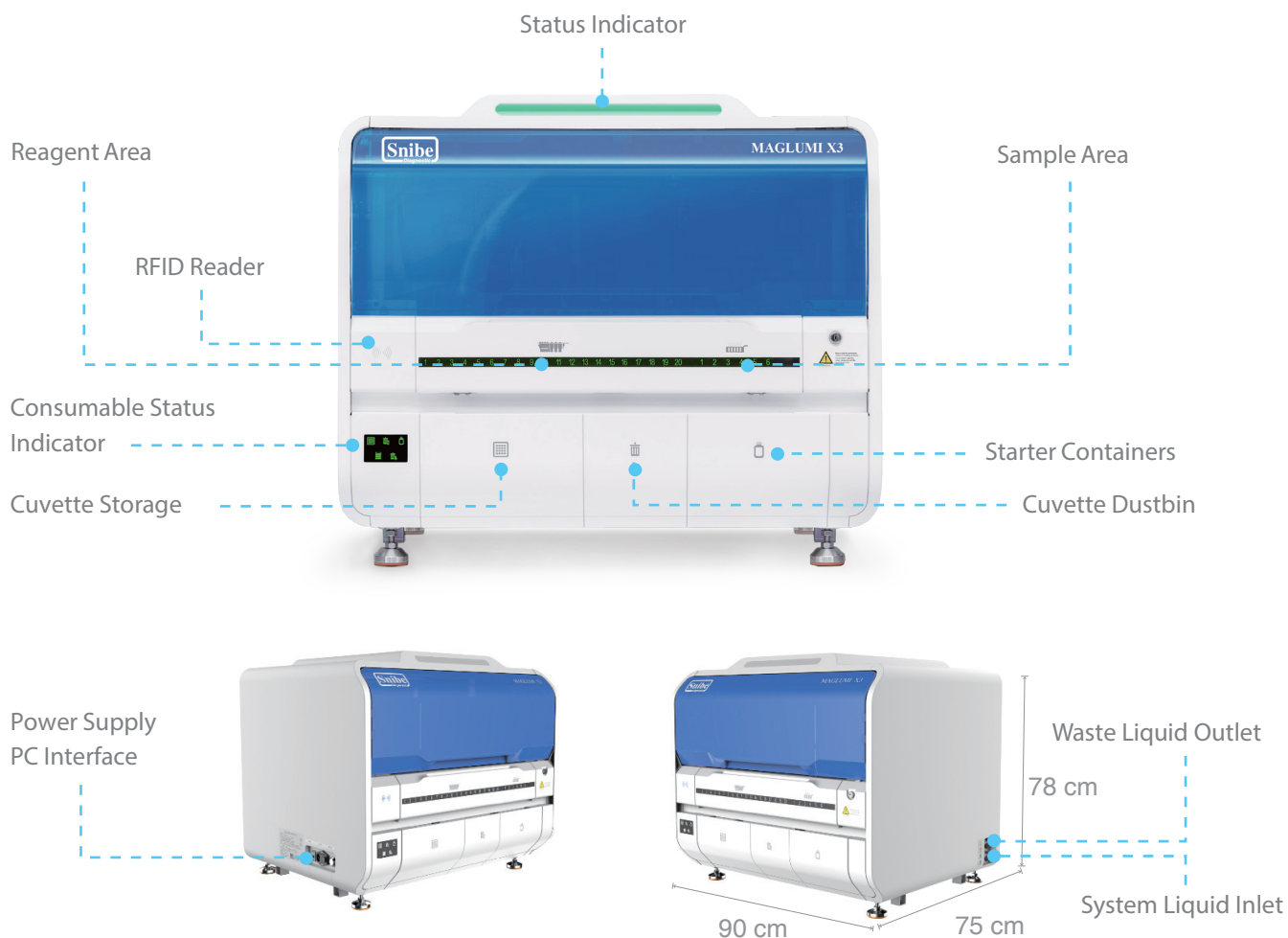


# MAGLUMI® X3

## Features & Benefits

- Small but powerful, the throughput is up to 200 tests/hour, and throughput per unit area is 294 T/h/m<sup>2</sup>.
- Compatible with all MAGLUMI® reagents, one of the broadest automated CLIA test menus in the world (166 parameters).
- The latest intelligent washing technology and bidirectional temperature control measurement guarantee accurate and reliable results. The comprehensive advanced design of MAGLUMI® X3 ensures excellent performance.
- Single reaction cup can avoid light pollution and increase cuvette utilization, its integrated packaging can avoid the stuck of the cuvette and destroying the cuvette wall.
- No-pause loading/unloading of reagents/samples without waiting or interrupting tests.

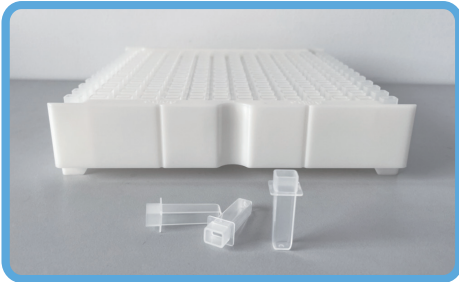
## Functional Modules





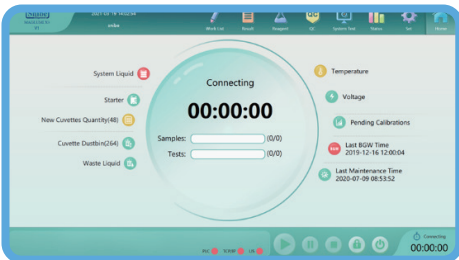
## Reagent and Sample Loading

- 72 sample positions with barcode reader
- Sample in each position can be defined as STAT
- 20 reagent positions with RFID reader, 24h refrigerated at 10°C ( $\pm 0.3^{\circ}\text{C}$ )
- No-pause loading/unloading of reagents/samples without waiting or interrupting tests
- Reagent and sample indicator light available, real-time status monitoring, no need to check on the computer monitor



## Single Reaction Cup with Integrated Packaging

- Single reaction cup can avoid light pollution and increase the cuvette utilization
- Single reaction cup with integrated packaging can avoid the stuck of the cuvette and destroying the cuvette wall



## Intelligent UI Interface

- New user-friendly UI interface (Support multi-language)
- Real-time display for monitoring each test procedure, reagent, and consumable quantities, it's convenient for the management
- Intelligent error recovery



## Convenient Management of Analyzer Status

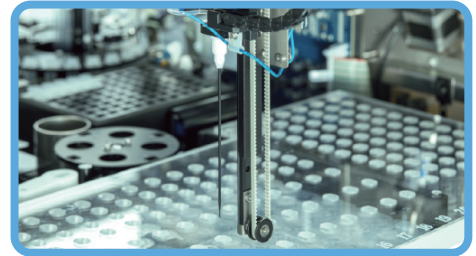
- Intuitive indicator light of reagent, sample, and consumables, no need to focus on the monitor, the status can be known by looking at the analyzer from a distance



# All Balanced and Strong

## Accurate Pipetting Technology

- Single needle coated with TEFLON to avoid carry-over
- Independent washing unit for the needle, with different washing modes depending on different assay
- Pipetting detection technologies include liquid level, clot, and crash detection can ensure accurate and normal pipetting



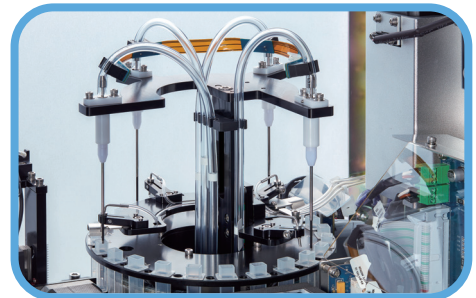
## Accurate Incubation Technology

- Single reaction cup with five-sided heating at 37.0°C ( $\pm 0.3^\circ\text{C}$ ), ensuring accurate, quick and uniform incubation
- Incubating 80 cuvettes simultaneously
- Non-contact mixing with different modes before incubation, ensuring sufficient reaction



## High-Efficiency Washing Technology

- Magnetic separation washing with 4-step independent units and non-contact vortex mixing can reduce non-specific binding
- Different mixing modes depending on different assays, ensuring a sufficient washing to improve sensitivity



## Stable and Accurate Measuring Chamber

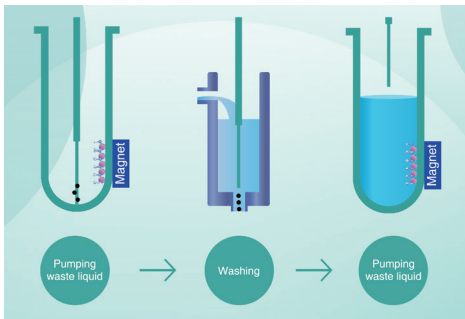
- ABEI-label exclusive proprietary technology
- PMT with heating and cooling function, ensuring the detection precision
- Independent measuring room, avoiding light cross-contamination





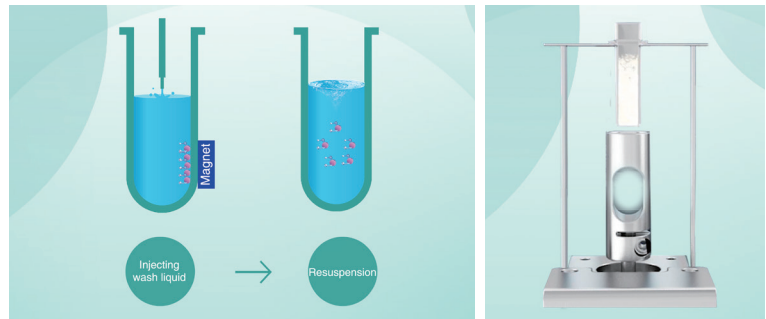
## Exclusive Intelligent Washing Technology

### Independent washing units for waste liquid needles



In the wash station, four waste liquid needles are equipped with four independent washing units to avoid the carry-over.

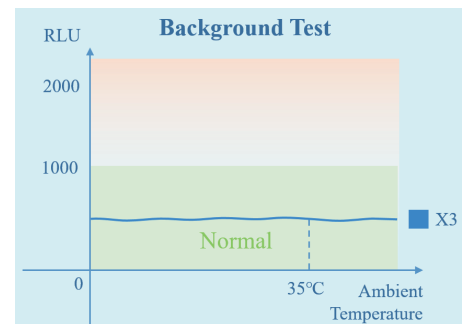
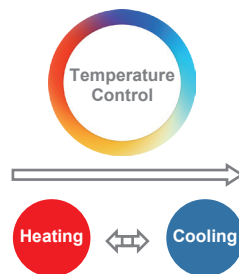
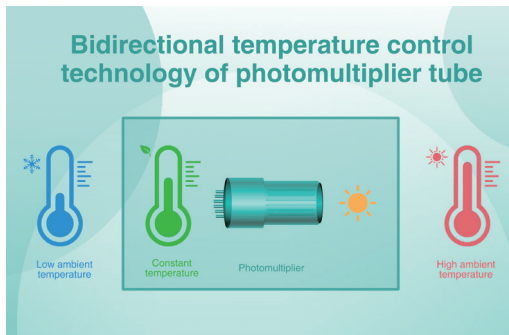
### Magnetic separation washing and non-contact vortex mixing



Magnetic separation washing and non-contact vortex mixing units, with different mixing modes depending on different assays, ensuring a sufficient washing to reduce the non-specific binding.

## Stable and Accurate Measuring Chamber

### Bidirectional temperature control technology of photomultiplier tube



Automatic temperature control in the measuring chamber can keep a stable background value, not affected by the ambient temperature, ensuring the accuracy of measurement results.





## Top 10 Highlights of MAGLUMI® X3

- 1 One of the highest space efficiency CLIA analyzers combines one of the broadest automated CLIA test menus.
- 2 The throughput is up to 200 tests/hour (Throughput per unit area is 294 T/h/m<sup>2</sup>). No worry about the lack of laboratory space.
- 3 **MAGLUMI®** reagent kits (166 parameters) and consumables are compatible with **MAGLUMI® X3**.
- 4 The comprehensive advanced design of **MAGLUMI® X3** ensures excellent performance.
- 5 Single reaction cup can avoid light pollution and increase cuvette utilization, its integrated packaging can avoid the stuck of the cuvette and destroying the cuvette wall.
- 6 No-pause loading/unloading of reagents/samples without waiting or interrupting tests.
- 7 Pipetting detection technologies include liquid level, clot, and crash detection can ensure accurate and normal pipetting.
- 8 The latest intelligent washing technology and bidirectional temperature control measurement guarantee accurate and reliable results.
- 9 Intelligent UI interface, user-friendly, easy, and convenient operation.
- 10 Intuitive indicator light make users no need to check reagents and consumables frequently.

## MAGLUMI® X3 Reagent and Consumables



Reagent Kit



Reaction Module



Starter 1+2



Light Check



Wash Concentrate



System Tubing Cleaning Solution

# Broad CLIA Test Menu with 166 Assays



## Thyroid

TSH (3rd Generation)  
T4  
T3  
FT4  
FT3  
Tg (Thyroglobulin)  
TGA (Anti-Tg)  
Anti-TPO  
TRAb  
TMA  
Rev T3  
\*T-Uptake

## Hepatic Fibrosis

HA  
PIIIP N-P  
C IV  
Laminin  
Cholyglycine

## TORCH

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

## EBV

EBV EA IgG  
EBV EA IgA  
EBV VCA IgG  
EBV VCA IgM  
EBV VCA IgA  
EBV NA IgG  
EBV NA IgA

## Inflammation Monitoring

CRP (High Sensitive)  
PCT (Procalcitonin)  
IL-6 (Interleukin 6)  
SAA (Serum Amyloid A)

## Fertility

FSH  
LH  
HCG/ $\beta$ -HCG  
PRL (Prolactin)  
Estradiol  
Testosterone  
free Testosterone  
DHEA-S  
Progesterone  
free Estriol  
17-OH Progesterone  
AMH  
SHBG  
Androstenedione  
\*PIGF  
\*sFlt-1

## Hypertension

Direct Renin  
Aldosterone  
Angiotensin I  
Angiotensin II  
Cortisol  
ACTH

## Autoimmune

Anti-CCP  
Anti-dsDNA IgG  
ANA Screen  
ENA Screen  
Anti-Sm IgG  
Anti-Rib-P IgG  
Anti-Scl-70 IgG  
Anti-Centromeres IgG  
Anti-Jo-1 IgG  
Anti-M2-3E IgG  
Anti-Histones IgG  
Anti-nRNP/Sm IgG  
Anti-SS-B IgG  
Anti-SS-A IgG  
TGA(Anti-Tg)  
Anti-TPO  
TRAb  
TMA  
ICA  
IAA(Anti Insulin)  
GAD 65  
Anti-IA2  
\*Anti-Cardiolipin IgG  
\*Anti-Cardiolipin IgM  
\*Anti-MPO

## Immunoglobulin

IgM  
IgA  
IgE  
IgG

## Tumor Markers

AFP  
CEA  
Total PSA  
f-PSA  
CA 125  
CA 15-3  
CA 19-9  
PAP  
CA 50  
CYFRA 21-1  
CA 242  
CA 72-4  
NSE  
S-100  
SCCA  
TPA-snibe  
ProGRP  
HE4  
HER-2  
PIVKA-II

## Infectious Disease

HBsAg  
Anti-HBs  
HBeAg  
Anti-HBe  
Anti-HBc  
Anti-HCV  
Syphilis  
Anti-HAV  
HAV IgM  
HIV Ab/Ag Combi  
Chagas  
HTLV I+II  
H.pylori IgG  
H.pylori IgA  
H.pylori IgM  
2019-nCoV IgG  
2019-nCoV IgM  
SARS-CoV-2 S-RBD IgG  
SARS-CoV-2 Neutralizing Antibody  
SARS-CoV-2 Ag  
\*Anti-HBc IgM

## Drug Monitoring

Digoxin  
CSA (Cyclosporine A)  
FK 506 (Tacrolimus)

## Kidney Function

$\beta_2$ -MG  
Albumin  
\*NGAL

## Cardiac

CK-MB  
Troponin I  
Myoglobin  
hs-cTnI  
H-FABP  
NT-proBNP  
BNP  
D-Dimer  
Lp-PLA2  
\*MPO

## Metabolism

Pepsinogen I  
Pepsinogen II  
Gastrin-17  
GH (hGH)  
IGF-I  
IGFBP-3

## Prenatal Screening

AFP(Prenatal Screening)  
Free  $\beta$ -HCG  
PAPP-A  
free Estriol

## Anemia

Vitamin B12  
Ferritin  
Folate (FA)  
\*RBC Folate  
\*EPO

## Glyco Metabolism

C-Peptide  
Insulin  
GAD 65  
Anti-IA2  
ICA  
IAA (Anti Insulin)  
Proinsulin

## Bone Metabolism

Calcitonin  
Osteocalcin  
25-OH Vitamin D  
Intact PTH  
\* $\beta$ -CrossLaps ( $\beta$ -CTX)  
\*total P1NP

\* Available soon

# MAGLUMI® X3

## Fully Automatic Chemiluminescence Immunoassay (CLIA) System

### Technical Specifications

#### Chemiluminescence Principle

- Direct chemiluminescence
- Magnetic microbeads separation, fast and efficient
- Key technology of ABEI-label and magnetic microbead separating enhances stability and sensitivity of MAGLUMI® reagents

#### Main Features

- Throughput: up to 200 tests/hour
- Space occupied <math>0.68\text{m}^2</math>, throughput of per unit area >294T/h/m<sup>2</sup>
- 24 hours ready to use

#### Reagent Loading

- 20 reagent positions on board with no-pause loading/unloading
- 24-hour refrigerated, constant at 10°C ( $\pm 0.3^\circ\text{C}$ ) in reagent area
- RFID reading all information of reagent
- Indicator light available, real-time status monitoring

#### Sample Loading

- Up to 72 sample positions
- No-pause loading/unloading, STAT available
- Indicator light available, real-time status monitoring
- Barcode recognition: Barcode reader available
- Types of sample tube: micro sample cup, blood collection tube, plastic test tube
- Sample editing mode: Lis connection, barcode recognition, manual editing

#### Reagent Features

- MAGLUMI® reagent kits are compatible with all MAGLUMI® analyzers
- Calibrators and internal controls included
- 10 points master curve, 2-points re-calibration
- RFID tag storing all informations of reagents
- Storage temperature 2°C-8°C

#### Reaction System

- Single reaction cup with five-sided heating at 37.0°C ( $\pm 0.3^\circ\text{C}$ ) incubation, ensuring accurate, quick and uniform incubation
- Incubating 80 cuvettes simultaneously
- Non-contact mixing with different modes before incubation, ensuring sufficient reaction

#### Sampling System

- Titanium needle for crushproof
- Teflon coated for carry-over prevention
- Liquid level detection, clot detection, prevent bubble interference, collision detection, wash automatically

#### Consumable System

- Single cup design, no-pause loading/unloading
- Starters: 230mL of Starter 1 and Starter 2
- System liquid: Up to load 10L at one time
- Indicator light monitors real-time consumable quantity

#### Washer

- 4-step washing technology
- Intelligent magnetic field design ensure excellent separation
- Three independent non-contact magnetic microbeads vortex cleaning technology
- Resuspension washing mode efficiently reduces non-specific binding and improves sensitivity
- Independent washing unit for waste liquid needle can completely wash without residue

#### Measuring Chamber

- High-sensitivity and low-noise photomultiplier tube (PMT)
- Heating and cooling bidirectional temperature control function included
- Original light pollution isolation technology prevents light pollution and ensures accurate and reliable results

#### Software System

- Friendly software UI design, humanized instrument operation procedure
- Real-time status display for each test procedure
- Self-recovery function make sure the analyzer running smoothly without unnecessary manual intervention
- Bidirectional Snibelis™ connection by TCP/IP and COM Port
- Supporting SnibeLinker™ remote diagnosis system

#### Dimensions & Weight

- Dimensions: 78 (h) × 90 (w) × 75 (d) cm
- Weight: 127 kg