

Immunoassay Analyzer

LM CLIA 1020



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As one of the world's smallest, fully automated chemiluminescence immunoassay analyzers, the LM1020 integrates a large capacity and fast assay speed into a compact model, achieving a perfect balance between size and immunoassay testing performance.

Today, laboratories not only need more reliable routine Immunoassay testing by way of high processing speed, reproducibility, dependability, accuracy & quality for wider clinical correlation and diagnosis. On the other hand, they are restricted by limited budgets. LM 1020 can help to meet all these needs just perfectly and even exceed the expectations.



Technology

- Measurement principle: Enhanced ALP-AMPPD method
- Throughput of up to 180 tests/hour
- 50 sample positions and 15 reagent positions



Ease of Operation

- Only one start key
- Real-time consumables status monitoring



Efficient Management

- Continuous loading of samples, reagents, substrates and cuvettes
- User maintenance free, with no hidden cost



Reagent Assembly

- 15 Reagent positions, continuous loading, real time mixing for magnetic particles
- 2~8 °C cooling system
- Built in & external barcode reader



Assay Parameters

- Calibration stability of 28 days
- Ready to use reagents



Sample Assembly

- Continuous sample loading and offloading
- 50 sample positions

TEST MENU
Thyroid

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

Infectious Disease

HIV Combo
HBsAg
Anti-BHs
BHeAg
Anti-HBe
Anti-HBc
Anti-HBc
Anti-HCV
anti-TP (Syphilis)
HBeAg quantitative*
Anti-HBcIgM*

Fertility

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

Tumor marker

CEA
AFP
CA 125
CA 15-3
CA 19-9
FPSA
TPSA
NSE
CYFRA 21-1
CA 72-4
PG I
PG II
SCCA
HE4
ProGRP
CA 50
CA 242

Bone

Intact PTH
Calcitonin
Osteocalcin
25-OH Vitamin D

Cardiac

CK-MB
Myoglobin
Troponin I
BNP
NT - Pro 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 β -HCG*

*Under development
Product availability subject to required regulatory approval

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
Sample positions	50
Sample Probe	Steel probe, liquid level detection, clot detection, Horizontal and vertical collision protection
Sample Volume	10~200ul, with increment of 1ul
Sample Dilution	Automatic dilution with 1:2~1:40

Reagent Assembly

Reagent Disk	15 reagent positions, continuous loading, real-time mixing for magnetic particles
Cooling System	2~8 °C
Reagent Pack	50 tests/pack, 100 tests/pack
Reagent Scanning	Build-in/External bar code reader
Reagent Probe	Steel probe, liquid level detection, clot detection, Horizontal and vertical collision protection
Reagent Volume	10~200ul, with increment of 1ul

Substrate System

Substrate Bottle	500 tests per bottle, bottom piercing
Substrate Loading	Capable of continuous loading during testing
Substrate Heating	Constant heating
Aspiration Volume	200ul

Magnetic separation unit

Separation Assembly	3-phase magnetic separation
Temperature	Accuracy : 37 ± 0.3°C

Measurement and Reaction System

Detection Mode	Photon counting
Signal Detector	Photomultiplier (PMT) photo counter
PMT Calibration	LED reference module
Incubation positions	82
Temperature	Accuracy : 37±0.3°C
Mixing Unit	Non-touch vortexer mixing

Cuvette Loading Waste Collection

Cuvette	Disposable Plastic cuvette
Cuvette	88 cuvettes per tray, 2 trays can be loaded in one batch, continuous loading and offloading
Waste collection	Waste container, 200 cuvettes per box

Working conditions

Power Supply	100-240V~50/60Hz
Input Power	500VA
Operating Temperature	15~30°C
Relative Humidity	35% RH~85%RH, without condensation
Dimension	860mm*740mm*560mm (W*D*H)
Weight	132Kg
Altitude Height	-400m~3000m (70kpa)

