

Technical Specifications

General Information

Methodology	Electro-chemiluminescence Immunoassay (ECLIA)
Chemiluminescence label	Ruthenium-complex
Test mode	Random access, Batch, STAT
Throughput	300 T/h
Time to first result	9-27 mins

Sample assembly module

Sample position	150 routine positions + 5 STAT positions, Continuous loading
Sample transfer track	3 tracks for routine, STAT and returning samples, respectively
Sample dispatch	Automatic sample dispatch, STAT priority, Automatic dilution, Automatic retest
Sample barcode reading	Integrated automatic scanning

Sampling module

Sample volume and type	5-100 μ L; Serum and plasma
Sampling probe	Disposable tip, Liquid level detection, clot detection, anti-collision function, aspiration fail detection

Reagent module

Reagent position	40 reagent positions, 2-8 $^{\circ}$ C onboard refrigeration, Onboard loading
Reagent volume	6-200 μ L
Reagent probe	Liquid level detection, bubble detection, anti-collision function, aspiration fail detection
Reagent loading	Automatic RFID reading

Reaction module

Incubation position	94 positions, Automatic continuous loading, disposable assay cup
Incubation temperature	37.0 $^{\circ}$ C \pm 0.3 $^{\circ}$ C, with a fluctuation of 0.2 $^{\circ}$ C
Sample processing	Double-step magnetic separation, Non-contact vortex sample mixing

Consumable management

Consumable position	2 sets of system reagent consumable positions, 15 trays of solid consumable support 1575 tests, Onboard loading
Consumable status	Real-time monitoring

Working condition

Power supply	~220V; 50Hz
Input power	Analytical unit: 1500VA; Sample unit: 700VA
Operating temperature	15 $^{\circ}$ C~30 $^{\circ}$ C
Humidity	30%~70%
Dimensions (mm)	1665mm (W) * 1000mm (D) * 1282mm (H)
Weight	550 kg

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eCL9000

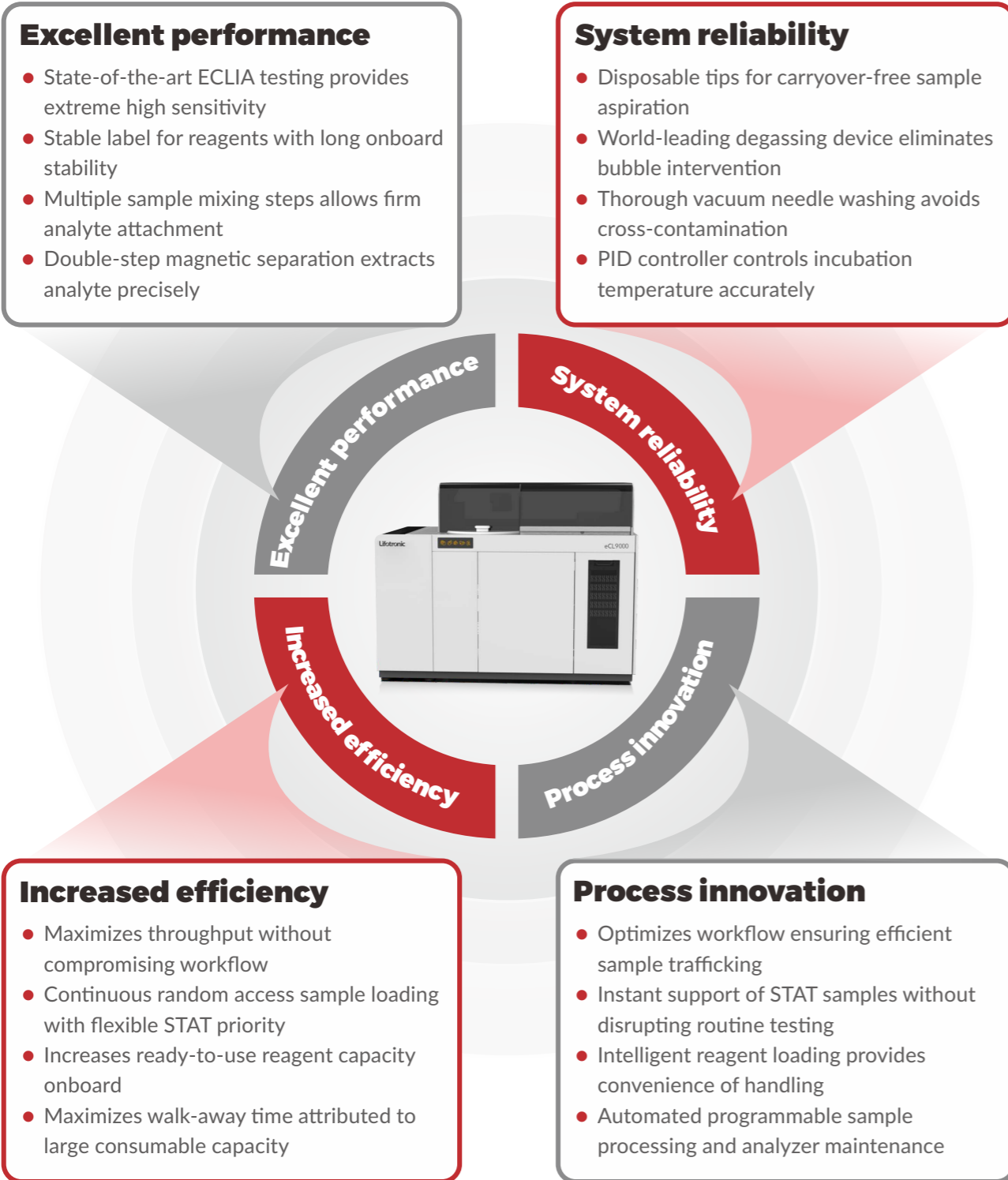
Lifotronic

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Automated Electro-chemiluminescence Immunoassay (ECLIA) Analyzer

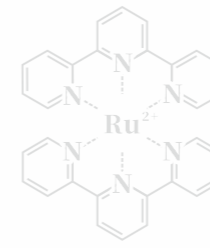




Assay Menu

Tumor marker CEA AFP CA 19-9 CA 15-3 CA 125 HE4 TPSA FPSA SCC NSE CYFRA 21-1 proGRP CA 72-4 S100 CA 50 CA 242	Cardiac cTnI CK-MB MYO NT-proBNP H-FABP Lp-PLA2 MPO hs-cTnT STAT CK-MB STAT MYO STAT NT-proBNP STAT BNP STAT BNP H-FABP STAT Lp-PLA2 STAT* hs-cTnI STAT* sT2*	Fertility FSH LH PRL E2 TESTO PROG Total β-HCG AMH SHBG Total β-HCG STAT PROG STAT free TESTO* 17α-OHP* DHEA-S*	COVID-19 SARS-CoV-2 IgG SARS-CoV-2 IgM SARS-CoV-2 Neutralizing Ab
TORCH Toxo IgG Toxo IgM Rubella IgG* Rubella IgM* CMV IgG* CMV IgM* HSV-1 IgG* HSV-2 IgG* HSV-1 IgM* HSV-2 IgM* Toxo IgG Avidity* CMV IgG Avidity*	Cytokines IL-1 β IL-2 IL-2R IL-4 IL-5 IL-6 IL-8 IL-10 IL-17A TNF-α INF-γ* INF-α* IL-12p70*	Inflammation PCT IL-6 hs-CRP SAA PCT STAT IL-6 STAT hs-CRP STAT HBP*	Infectious HBsAg Anti-HCV HIV Ag+Ab Syphilis HBeAg Anti-HBs Anti-HBe Anti-HBc
Bone marker 25-OH Vitamin D 25-OH Vitamin D II PTH CT N-MID P1NP* β-CTx*	Growth hormone hGH IGFBP-3 Inhibin B* Androstenedione*	Hypertension Cortisol ACTH Aldosterone Renin	Thyroid TSH T4 T3 FT4 FT3 TG TBG Anti-TPO Anti-TG Anti-TSHR rT3*
Diabetes Insulin C-peptide	Prenatal screening AFP free β-HCG* PAPP-A* uE3*	Anemia Vitamin B12 Folate Ferritin EPO*	Coagulation D-Dimer STAT FDP TAT* PIC* TM* t-PAI-C*
		Hepatic fibrosis CIV CG LN PIIINP HA	Gastric marker PG-I PG-II Gastrin-17
			Allergy IgE
			Autoimmune Anti-CCP

* Coming soon

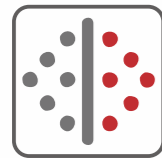
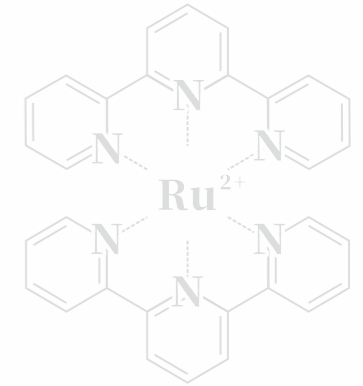


Sample transfer module

- 3 tracks for routine, STAT and returning samples, respectively
- Automatic sample dispatch
- Smooth delivery without compromising workflow

Sample probe module

- 5-100 μ L
- Disposable tip makes sure no carryover
- Multiple sample mixing steps



Magnetic separation module

- Double separation steps, sensitivity reaches pmol/L



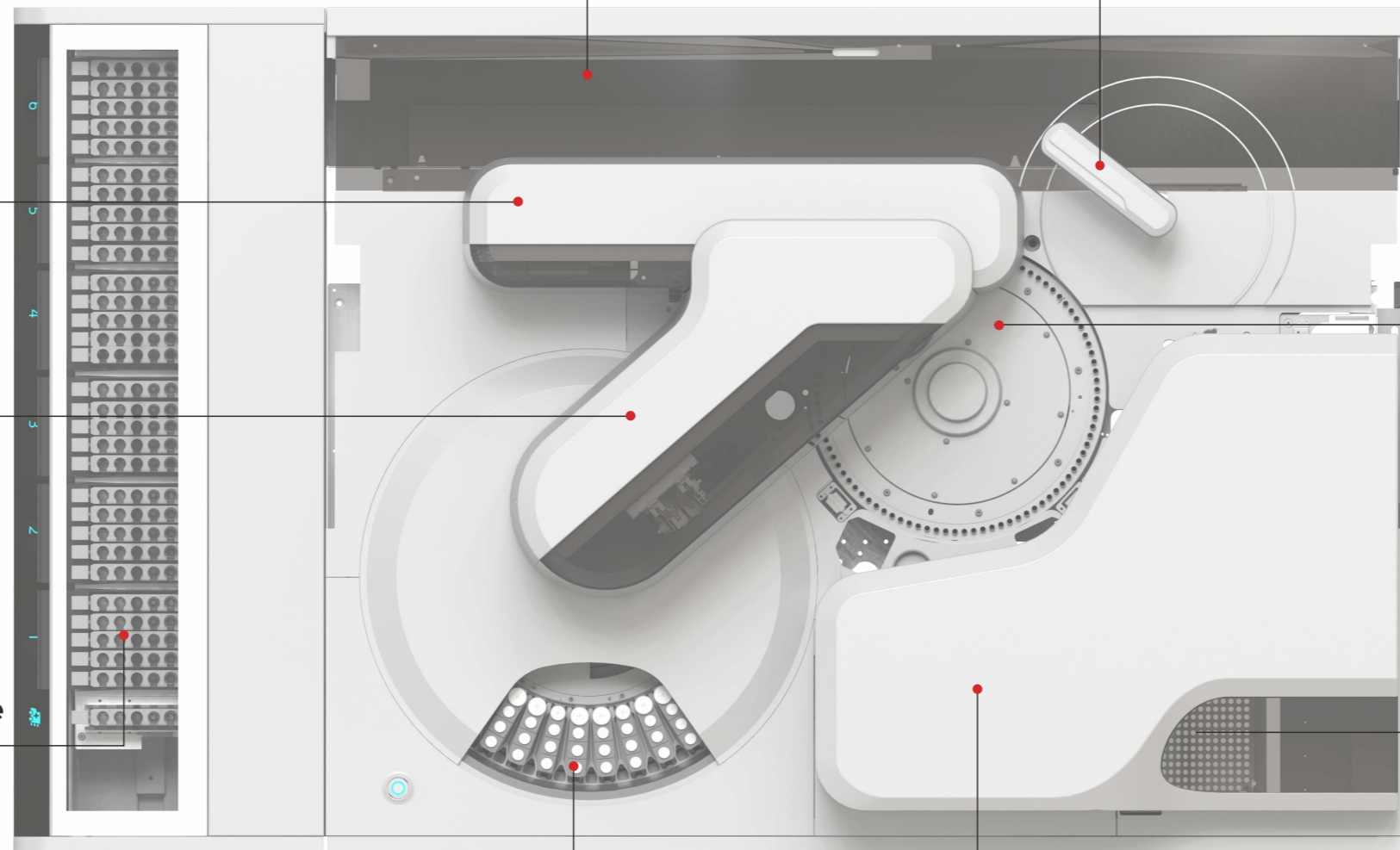
Reagent probe module

- 6-200 μ L
- Needle waterfall vacuum washing avoids cross-contamination
- Unique two-needle design, increase efficiency



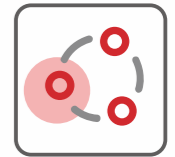
Sample loading module

- 150 routine sample positions + 5 STAT positions
- Random access with 6 independent sample sets
- Continuous sample loading and uploading



Incubation module

- $37 \pm 0.3^\circ\text{C}$ precise temperature control
- Non-contact vortex sample mixing
- Continuous automatic assay cup loading



Solid consumable module

- Prepacked disposable tip/assay cup tray
- 15 trays support 1575 tests

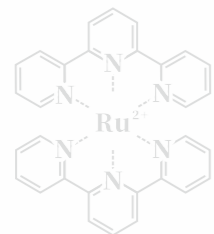


Reagent module

- 40 reagent positions
- Constant $2-8^\circ\text{C}$ refrigeration slots
- Automatic reagent loading with RFID card
- Onboard reagent loading

Measuring cell

- World leading ECLIA methodology
- Constant throughput of 300T/h
- As fast as 9 minutes to show 1st result

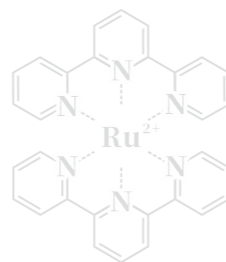


eCL9000

Automated Electro-chemiluminescence Immunoassay (ECLIA) Analyzer

Superior detection performance

- Controllable ECLIA reaction results in stable, even and long-lasting signal
- Non-contact vortex sample mixing and double-step magnetic separation
- Extreme high sensitivity reaches pmol/L

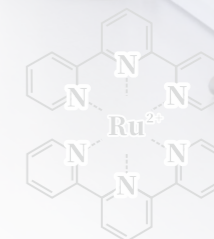


Promising system reliability

- Sample transfer with disposable tip prevents carryover
- Robust needle cleaning method minimizes cross-contamination
- PID automatic and precise temperature control of 37°C incubation

High efficiency

- Constant throughput up to 300 T/h with first result in 9-27 minutes
- Onboard loading of reagent and continuous loading of samples
- Intelligent sample tracks allow quick turnaround time (TAT)

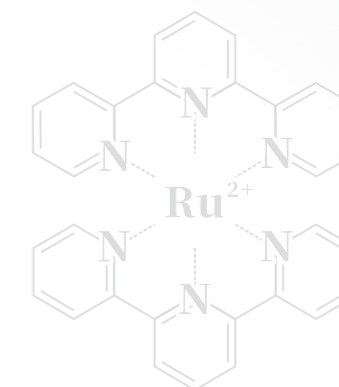


Increased handling convenience

- Automatic sample information loading, dispatch, retest, and dilution
- Automatic RFID reading of reagent information
- 2-8 °C refrigerated reagent positions enable access anytime

Intelligent consumables management

- 2 sets of consumable slots enable onboard replacing
- 15 trays of solid consumable allow long walk-away time
- Real-time indicator of consumable status for easy-monitoring



Multi-dimensional modularity

- Connectable with up to 4 eCL9000, reaching a throughput of 1200 T/h
- Configurable with Lifotronic 2000T/h Biochemistry analyzer
- Tailor-made solutions for diverse workload and testing requirements