Sys 220

Accuracy Within Reach

Flexible | Progressive | Pioneering

Tailored Precision for Small-Scale Operations

DiaSys
Diagnostic Systems

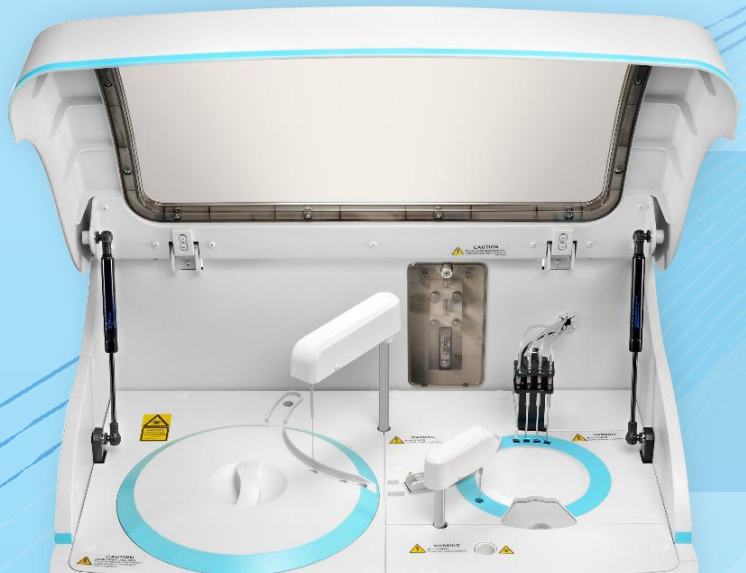
CHOOSING QUALITY.

Accuracy within reach

The DiaSys Sys 220 is a compact, fully automated clinical chemistry analyzer, ideal for small to medium labs. It offers high performance, user-friendly operation, and reliable results across a wide range of tests, ensuring efficiency and faster turnaround times.

KEY FEATURES

- **Compact Design :** Space-efficient, ideal for small labs without compromising functionality.
- **Fully Automated:** Handles 200 photometric and 400 electrolyte tests per hour.
- **Wide Test Menu:** Supports a variety of tests, with the flexibility to add more.
- **High Throughput:** Faster sample processing for improved productivity and TAT.
- **Enhanced Accuracy:** Advanced optics for precise results (340-800 nm wavelength range).
- **User-Friendly Interface:** Intuitive software with real-time status and data management.
- **Sample & Reagent Management:** Continuous loading with an 40-position sample carousel.
- **Cost-Efficiency:** Low reagent consumption to reduce waste and operational costs.
- **Maintenance:** Automated routines and modular design for quick repairs.
- **Flexible Configurations:** Customizable to suit specific lab needs without costly upgrades.



Value Proposition

- Time Savings
- Resource Optimization
- Enhanced Accuracy
- Reliability
- Consistency
- Scalability
- Space-Saving

Test Menu of Clinical Chemistry

A wide and specialized test menu in clinical chemistry is vital for accurate and comprehensive diagnosis, allowing for detailed patient assessments. It enhances operational efficiency by consolidating tests in one place, reduces outsourcing, and provides a competitive edge by addressing diverse diagnostic needs.

Liver Function test (LFT)

Albumin FS
Alkaline Phosphatase FS IFCC
ALAT (SGPT) FS IFCC
ASAT (SGOT) FS IFCC
Ammonia
Bilirubin Auto Direct FS
Bilirubin Auto Total FS
Cholinesterase FS
Gamma GT FS (Szaaz method)
LDH 21 FS IFCC
Total protein FS
Total Bile Acids 21 FS

Renal Function

Albumin in urine/CSF FS (Microalbumin)
Calcium P FS
Calcium AS FS
Creatinine Jaffe FS
Creatinine PAP FS
Cystatin C FS
Glucose Hexokinase FS
Magnesium XL FS
One HbA1c FS
Phosphate FS
Total Protein UC FS (Urine & CSF)
Uric Acid FS TBHBA
Urea

Diabetes

Albumin in urine/CSF FS (Microalbumin)
ß-Hydroxybutyrate 21 FS
Glucose Hexokinase FS
Glucose GOD FS
Non-esterified fatty acids (NEFA) FS
One HbA1c FS

Metal Profile

Calcium FS
Copper FS
Magnesium XL FS
Zinc FS

Lipids (Arteriosclerotic risk)

Apolipoprotein A1 FS
Apolipoprotein B FS
Cholesterol FS
CRP U-hs FS
Homocysteine
HDL-C Direct FS
LDL-C Direct FS
Lp(a) 21 FS
Lp-PLA2 FS
Non-esterified fatty acids (NEFA) FS
Triglycerides FS

Cardiac

Angiotensin Converting Enzyme (ACE)
Apolipoprotein A1 FS
Apolipoprotein B FS
CK-NAC FS
CK-MB FS
CRP U-hs FS
Homocysteine
Lp(a) 21 FS
Lp-PLA2 FS
Myoglobin

Pancreas

Alpha-Amylase CC FS
Lipase DC FS
Pancreatic amylase FS

Bones, Osteoporosis

Alkaline Phosphatase FS IFCC
Calcium FS
Phosphate FS
Vitamin D
Rheumatoid Factor FS

Pulmonary Profile

Adenosine Deaminase (ADA)
Angiotensin Converting Enzyme (ACE)

Thrombosis

D-Dimer

Iron metabolism, Anemia

Ferritin FS
Iron FS Ferene
Transferrin FS
UIBC FS
Glucose-6-phosphate dehydrogenase (G6PDH)

Metabolic parameters

Bicarbonate FS
Chloride 21 FS
Lactate FS
Potassium FS
Sodium FS

Infection Panel

Immunoglobulin A FS
Immunoglobulin E FS
Immunoglobulin G FS
Immunoglobulin M FS
Antistreptolysin O (ASO)

Inflammation

CRP FS
CRP U-hs FS
Procalcitonin (PCT) FS
Rheumatoid Factor FS
Complement C3cFS
Complement C4FS

Nutrition

Albumin FS
Magnesium XL FS
Prealbumin FS
Total protein FS
Uric Acid FS TBHBA

Electrolyte

Chloride 21 FS
Potassium FS
Sodium FS

Technical Specifications

System Function
Automatic, Discrete, Random Access, Bench-top

STAT sample priority
Throughput: Up to 200 tests/hour, up to 400 tests/hour with ISE

Measuring principles: Absorbance photometry, Turbidimetry, Ion

Selective Electrode technology
Methodology: End-point, Fixed-time, Kinetic, optional ISE, Single/Dual/ reagent chemistries, monochromatic / bi-chromatic

Original system pack reagent ready to use

Close system and open system is optional

Reagent/Sample Handling
Reagent/Sample tray: 40 positions for reagents, 40 positions for samples and 40 interchangeable to extend in 24-hour refrigerated compartment (2~12°C)

Reagent volume: 10~250μl, step by 0.5μl

Sample volume: 2~45μl, step by 0.1μl

Reagent/Sample probe: Liquid level detection, vertical collision protection and inventory checking, reagent pre-warming

Probe cleaning: Automatic washing for interior and exterior Carry over < 0.05%

Automatic sample dilution: Pre-dilution and post-dilution

Internal bar code reader (optional)

Used for sample and reagent programming

Be applicable to various bar code systems of Codabar, ITF (Interleaved Two of Five),code128,code39,UPC/EAN、Code93

Capable to communicate with LIS in bi-directional mode

Reaction System:
Reaction rotor: Rotating tray, containing 40 cuvettes

Cuvette: Reusable, optical length

Reaction volume: 100~360μl

Operating temperature: 37°C

Temperature fluctuation: ± 0.1C

ISE Module (optional) Measuring K+, Na+, Cl-

Mixing Unit
Independent mixing bar

Cuvette Washing: Washing station with pre-warmed detergent and water

Optical System
Calibration modes: Linear (one point, two points and multi-points), Logit-Log 4P, Logit-Log 5P, spline, exponential, polynomial, parabola

Control Rules: X-R, L-J, Westgard multi-rule, Cumulative sum check, twin plot

Operation Unit
Operation system: Windows 8

Interface: RS-232

Working Conditions
Power Supply: 200~240V, 50/60Hz, ≤1000VA or 100~130V, 60Hz, ≤1000VA

Dimension: 690 mm (length) ×580 mm (depth) ×595 mm (height)

Weight: 79 kg

Water Consumption: ≤4L/H

Order Information

Item Code	Analyzer
4000004014	SYS 220 without ISE