

SYS 480

Unlock the Power of Precision



Diversity | Perfection | Resilient

Elevating Lab Standards.

DiaSys

Diagnostic Systems

CHOOSING QUALITY.

The **Sys 480** analyzer is a state-of-the-art laboratory instrument designed to streamline and enhance the process of biochemical analysis. This innovative device combines advanced technology with user-friendly features to deliver precise, reliable, and efficient results in various laboratory settings, including clinical, research, and industrial laboratories. Below is an overview of the **Sys 480** analyzer, covering its key features, benefits, and applications.



Key Features

High Throughput and Efficiency

- Processes multiple samples and reagents simultaneously for high-volume efficiency
- Continuous sample loading reduces downtime and maximizes productivity
- Rapid processing delivers timely results for critical applications



Efficient Washing System

- Comprehensive cleaning with pre-warmed deionized water and detergent to prevent contamination



Data Management and Connectivity

- Advanced data management integrates with laboratory information systems (LIS) and electronic medical records (EMR) systems
- Flexible export options for easy data sharing and analysis



Intelligent Mixing System

- Stepper motors with speed monitoring ensure thorough and consistent mixing



Precise Pipetting System

- Advanced technology handles minimum sample volumes of 1.5 μ L with high accuracy
- Efficient washing reduces carry-over to less than 0.05% for precise results



Reliable Heating System

- Maintenance-free solid heating technology maintains a stable 37°C reaction temperature
- 24-hour refrigeration keeps reagents at optimal temperatures of 2°C to 8°C



Streamlined HbA1c Processing

The **Sys 480** chemistry analyzer utilizes HbA1c smart-sampling technology for onboard automatic hemolysate preparation of whole blood samples, resulting in shorter turnaround times (TAT) and eliminating biohazardous risks or errors from manual operation.



Onboard Whole Blood Centrifugation

One Hemoglobin A1c (One HbA1c) is a glycated hemoglobin formed by non-enzymatic reaction of glucose with native hemoglobin. This process runs at a slow but constant rate during life span of erythrocytes. The glycation rate is directly proportional to the glucose level in blood.



High Precision and Specificity

The immunoturbidimetric method offers high precision and specificity, avoiding interference from hemoglobin variants and providing better performance.



Traceability to Reference Methods

The assays are traceable to IFCC/NGSP reference methods, ensuring reliable and standardized results.



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)	Lipids (Arteriosclerotic risk)	Iron metabolism, Anemia
Albumin FS	Apolipoprotein A1 FS	Ferritin FS
Alkaline Phosphatase FS IFCC	Apolipoprotein B FS	Iron FS Ferene
ALAT (SGPT) FS IFCC	Cholesterol FS	Transferrin FS
ASAT (SGOT) FS IFCC	CRP U-hs FS	UIBC FS
Ammonia	Homocysteine	Glucose-6-phosphate dehydrogenase (G6PDH)
Bilirubin Auto Direct FS	HDL-C Direct FS	
Bilirubin Auto Total FS	LDL-C Direct FS	
Cholinesterase FS	Lp(a) 21 FS	
Gamma GT FS (Szaaz method)	Lp-PLA2 FS	
LDH 21 FS IFCC	Non-esterified fatty acids (NEFA) FS	
Total protein FS	Triglycerides FS	
Total Bile Acids 21 FS		
Renal Function	Cardiac	Metabolic parameters
Albumin in urine/CSF FS (Microalbumin)	Angiotensin Converting Enzyme (ACE)	Bicarbonate FS
Calcium P FS	Apolipoprotein A1 FS	Chloride 21 FS
Calcium AS FS	Apolipoprotein B FS	Lactate FS
Creatinine Jaffe FS	CK-NAC FS	Potassium FS
Creatinine PAP FS	CK-MB FS	Sodium FS
Cystatin C FS	CRP U-hs FS	
Glucose Hexokinase FS	Homocysteine	Infection Panel
Magnesium XL FS	Lp(a) 21 FS	Immunoglobulin A FS
One HbA1c FS	Lp-PLA2 FS	Immunoglobulin E FS
Phosphate FS	Myoglobin	Immunoglobulin G FS
Total Protein UC FS (Urine & CSF)		Immunoglobulin M FS
Uric Acid FS TBHBA	Pancreas	Antistreptolysin O (ASO)
Urea	Alpha-Amylase CC FS	
Diabetes	Lipase DC FS	Inflammation
Albumin in urine/CSF FS (Microalbumin)	Pancreatic amylase FS	CRP FS
β-Hydroxybutyrate 21 FS		CRP U-hs FS
Glucose Hexokinase FS	Bones, Osteoporosis	Procalcitonin (PCT) FS
Glucose GOD FS	Alkaline Phosphatase FS IFCC	Rheumatoid Factor FS
Non-esterified fatty acids (NEFA) FS	Calcium FS	Complement C3cFS
One HbA1c FS	Phosphate FS	Complement C4FS
Metal Profile	Vitamin D	Nutrition
Calcium FS	Rheumatoid Factor FS	Albumin FS
Copper FS		Magnesium XL FS
Magnesium XL FS	Pulmonary Profile	Prealbumin FS
Zinc FS	Adenosine Deaminase (ADA)	Total protein FS
	Angiotensin Converting Enzyme (ACE)	Uric Acid FS TBHBA
		Electrolyte
	Thrombosis	Chloride 21 FS
	D-Dimer	Potassium FS
		Sodium FS

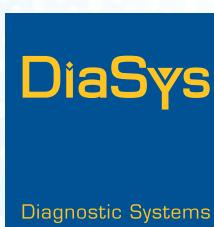
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Technical Specifications

Analytical System	Fully Automated, Discrete, random-access clinical chemistry System with STAT capability
Analytical Principle	Absorbance Photometry, Turbidimetry, Ion selective electrode technology (Optional)
Assay Type	End Point, Fixed Time, Kinetic, ISE (Optional)
Test Menu Applications	Photometric Tests, Serum Indices(LIH), HbA1c and ISE (Optional)
Throughput	Constant 420 Photometric Tests/Hour; up to 626 Test/Hour with ISE (Optional)
Sample Types	Serum, Plasma, Urine, Whole Blood & Other fluids
Sample Capacity	102 positions for samples, continuous loading
Sample Volume	1.5 μ L -45 μ L with step by 0.1 μ L
Reagent/Sample Probe	LLD, Horizontal & Vertical collision protection, Inventory checking, Reagent Pre-warming, Clot Detection
Sample Barcode Format	Codabar, ITF, Code 128, Code 39, UPC/EAN,Code 93
Reagent Capacity	92 Positions for (R1+R2, Detergent position) refrigerated 2°C-12°C Bottle Size - 40 mL; 20 mL
Reagent Volume	10 μ L - 200 μ L with step by 0.5 μ L
Total Reaction Volume	100 μ L - 360 μ L
Reaction Cuvettes	93 Reusable Cuvettes
Reaction Temperature	37°C \pm 0.1 °C
Photometric Range	0-3.5 Abs with resolution 0.0001 Abs
Wavelengths	12 Wavelengths, 340nm, 380nm, 412nm, 450nm, 505nm, 546nm, 570nm, 605nm, 660nm, 700nm, 740nm, 800nm
Calibration	K-Factor, Linear (Two Points and multipoint), Logit-Log 4P, Logit-Log 5P, Spline, Exponential, Polynomial, Parabola, Logit-Log 3P, Broken Line
Quality Control	Westgard multi-rule, Levey Jennings, Cumulative sum check, Twin plot
Online	Uni & Bi-Directional host query communications
Installation Requirements Dimensions (mm) & Weight (Kg)	1050mm (length) x 720mm (depth) x 1150mm (height); 200 Kg
Power Supply	200-240V, 50/60Hz, \leq 1300VA
Water Supply Information	\leq 20 L/H

Order Information

Item Code	Product
4000004026	SYS 480 with ISE
4000004016	SYS 480 without ISE



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