## GLAC6601 Glycated Hemoglobin HbA1c Analyzer (Automatic)



Accurate Principle of Methodology

Adopts classical and accurate principle of methodology – Ion exchange liquid chromatography, It is the gold standard of HbA1C analysis, and it is the only analysis method to really separate HbA1C directly by measuring the piecemeal absorbance through continuous test on line, and obtain the correct area percentage with integration.

## •Accurate separation 4-gradient elution

The novel 4-gradient elution for HbA1C can separate accurately glycated hemoglobin with 4-gradient elution of corresponding concentration reagent aiming at HbA1C instead of routine elution process produced by high and low concentration mixture.

•High Separation Liquid Chromatographic Column

High separation liquid chromatographic column made of imported resin with volume of  $\Phi$  9mm x 45mm and weight of 2.5g which is 15 – 20 times greater than general micro chromatographic column. High efficiency chromatographic column for 300 tests ensure the accuracy of test results.

•High Sensitivity 415nm LED Integral Photometer

High sensitivity 415nm LED integral photometer has the characteristics of correct wavelength, stable light source, full aluminum alloy structure, high anti-interference performance, multi-lens focusing, micro cuvettes and high sensitivity. It can record accurately analysis curve.

• Supply with Original Calibrator

The international standard value tracing is adopted. The authoritative reference material for quality control is used to transfer the numeric value. Each set of reagent is supplied with two sets of calibrator for proper calibration so as to ensure that the test results are correct and reliable and thoroughly to avoid individual error caused by factor calibration.

• Precision Chromatographic Column and Thermostatic Apparatus

Precision chromatographic column and reagent thermostatic control apparatus ensure that Chromatographic column and reagent are not affected by environment temperature and effectively guarantees the repeatability and correctness of the test results.

## Items of Human Oriented Design, Convenience, Speed and Reliability

•Real-time summarized chromatogram, Intelligence process detection

The advanced embedded micro processing system + intelligence control software can really display testing curve and the real redisplay of testing process and can monitor and alarm for test results, absorbency, signal potential, peak time and reagent consumption. It can be operated with high proficiency.

•Full-auto 25-position Sample Turntable, Optional Selection of Batch Test or Emergency Test With full-auto 25-position sample turntable, it is unnecessary to use complicated rank sampling device and built-in hemolysis device. Batch test can be automatically carried out. Emergency test can be carried out at any time.

•Full-open Structure, perfect flow path, low failure and easy maintenance

Full-open structure, Perfect solenoid valve flow path, it is unnecessary to use complicated sample mechanical 6-way and rotating distribution control valve. It is reliable for use and easy for maintenance.

•5ul whole blood, for both labs and clinics

5ul whole blood, both venous blood and peripheral finger blood can be tested, suitable for labs for batch tests and also suitable for clinics for providing test results immediately. Both venous blood and peripheral finger blood can be tested.

•With gas solution and bubble-removal technology, the error can be eliminated overall.

Since the instrument is equipped with reagent solvability gas eliminating device and applies the cuvette bubble auto detection eliminating technology, the air bubbles which affect the test results can be eliminated overall without the complicated degassing device.

•Saccharification concentration, area percentage and average glucose can be synchronously reported.

The instrument can output the data including IFCC concentration value, NGSP area percentage and ADAG average glucose on the test report synchronously to meet the requirement of world standardization. It may memorize 1000 test curve reports and is equipped with RS232 communication interface and can connect directly to HIS/LIS system.

## **Specifications**

Model	AC6601 Full-auto glycated hemoglobin HbA1c Analyzer
Basic Parameters	
Testing Method	Low pressure ion exchange liquid chromatography
Testing Item	glycated hemoglobin HbA1c
Testing Scope	$3\% \sim 18\%$
Testing Parameters	Precision (CV) ≤3%, Accuracy (V) ≤1.50%
Testing Time	4 minutes (including reporting)
Sample type	venous blood (EDTA anticoagulation),Peripheral finger blood
Sample volume	5µl whole blood for each sample
Functional Parameters	
Photometer	415nm LED Integral flow colorimeter
Sampling mode	Full-auto 25-position sample turntable (20 sample positions, 2 quality control positions, 1 emergency position, 1 cleaning position, 1 zero position)
Testing mode	auto test for batch, single test for emergency
Calibration	Optional selection of 2 points or 4 points calibration, optional selection of manual or automation, Equipped with 2 groups of high and low level calibrators
Thermostatic control	Column and reagent thermostatic control: 25 $\pm$ 0.5 $^{\circ}$ C
Reagent matching	one piece of column and reagent consumable/300 pieces of testing samples
Reagent allocation	Each standard package includes A, B, C, D eluent, calibrator, hemolytic agent, pump tubing
Output Parameters	
Display	320x240 LCD Graphic Display, displaying real-time testing curve
Printer	58mm Thermal printer, printing testing curve and report
Report Output	IFCC concentration value, NGSP area percentage, ADAG average glucose
Data storage	1000 test report (including testing curve)
Communication interface	RS232 communication interface, connecting to HIS/LIS system
Working Parameters	
Power Supply	AC220V±22V 50Hz 215VA
size	408mm×390mm×230mm
Weight	9kg
Working Environment	Temperature 12℃-30℃,Relative humidity ≤85%