



ES-6601

Full automatic
HbA1c Analyzer



LABORATORY



ES-6601

Full automatic HbA1c Analyzer_ENG



Faster

**Four new
comprehensive upgrades**

More accurate

More convenient

Inside Heating

No pre-heating step outside, operate easily

Durable pump tubing

Maintenance free micro pump, Accurate sample volume, accurate results, imported high performance pump tubing, using life is for 1000 tests. Reduce replacement frequency, easier operation.

Pressure monitor

With pressure testing device, monitor pressure at all times, more accurate results.

Filter to avoid the blockage

Filter sample device, to avoid Blockage and reduce failure rate greatly.

6 Test Technology Parameters Ensuring Accurate Results

Accurate Principle of Methodology

It adopts a classical and accurate methodology principle – Ion exchange liquid chromatography, It is the best standard in HbA1C analysis, and it is the only analysis method to 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 haemoglobin 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 chromatographic liquid column made of resin with volume of $\Phi 9\text{mm} \times 45\text{mm}$ and weight of 2.5g which is 15–20 times bigger than general micro chromatographic column. High efficiency chromatographic column for 300 tests to ensure the test results accuracy.



High Sensitivity 415nm LED Integral Photometer

High sensitivity 415nm LED integral photometer, stable light source, full aluminium alloy structure, high anti-interference performance, multi-lens focusing, micro-cuvettes and high sensitivity. It can record analysis curve.

Supply with Original Calibrator

The international standard value tracing. Each set of reagent is supplied with two sets of calibrator for proper calibration to ensure the test results are correct and reliable and avoid individual error caused by calibration factor

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 uncorrected test results

6 Human Oriented Parameters Design, Convenience & Speed

Real-time summarized chromatogram, Intelligence process detection

The advanced embedded micro processing system and the intelligence control software can real-time display the testing curve and the testing process and can monitor and alarm test results, absorbency, signal potential, peak time and reagent consumption.

Full-auto 25-position Sampler, Optional Selection of Batch Test or Emergency Test

With full-automatic 25-position rotating sampler, it is unnecessary to use complicated rank sampling device and built-in haemolysis 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 for clinics to provide immediately test results. Both venous blood and peripheral finger blood can be tested.

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

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.

Synchronic report: Saccharification concentration, area percentage & glucose average

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.

Technical Features

Basic Parameters

Testing Method	Low pressure ion exchange liquid chromatography
Testing Item	Glycated hemoglobin HbA1c
Testing Scope	3% ~ 18%
Testing Parameters	Precision (CV) $\leq 3\%$, Accuracy (V) $\leq 1.50\%$
Testing Time	4 minutes (including reporting)
Sample type	venous blood (EDTA anticoagulation), Peripheral finger blood
Sample volume	5 μ l 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: $25 \pm 0.5^{\circ}\text{C}$
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 \pm 22V 50Hz 215VA
Size	408mm \times 390mm \times 230mm
Weight	9kg
Working environment	Temperature 12 $^{\circ}$ -30 $^{\circ}$, Relative humidity $\leq 85\%$