



# Auto HbA1C ANALYZER HbA1LC HPLC 3660



EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

# **Analytical Technologies Limited**

An ISO 9001 Certified Company

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#### **▶▶** HbA1c Accuracy is the main key

It is the world consensus that glycated hemoglobin becomes the important diagnostic standard in diabetes HbA1c > 6.5% becomes the starting point for diabetes and HbA1c > 6.0 and < 6.5% is the main attribute for diabetes high risk group. The accuracy of HbA1C is utmost important for diabetes screening diagnosis, blood -glucose control and therapeutic effect monitoring. This interval of HbA1c is very narrow which is only 0.5% for the reason the accuracy of analyzer for glycatred hemoglobin is critical.

#### >> Real time Chromatogram True Reliability

HbA1c 3660 adopts the display technology with real time summarized chromatogram, carries out the basic principle of analysis instruments and appears the real original data. Discard modification of test results by means of software during late stage, it is ensured that the whole process of testing can be redisplayed truly, and provide credible results to clinic.

#### Accuracy + High Performance / Low Price

HbA1c 3660 adopts the principle of test methodology same as high pressure liquid chromatography HPLC and uses low pressure liquid chromatography in combination with the advanced test and analysis technology. It's results fully meet the testing requirements for glycated hemoglobin HbA1c in lan and provide accurate test report for clinical diagnosis. The price is much lower than the price of HPLC and reasonable consumable prices enable HbA1c 3660 has high performance / low price. HbA1c 3660 is specially suitable for the needs to test glycated hemoglobin HbA1c in all kinds of hospitals.

#### **▶▶ 6 Items Of Test Technology Ensuring Accurate Results**

#### **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 thrrough 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 Æ 9mm x 45mm and weight of 2.5g which is 15-20 times greater than general micro chromatographic column. High e□ ciency chromatographic column for 300 tests ensure the accuracy of test results.



#### High sensitivity 415nmLED integral Photometer

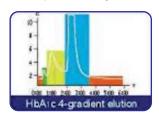
High sensitivity 415nm LED integral photometer has the characteristics of correct wavelength, stable light source, full aluminum alloy structure, high anti-interference performance. multi-lens focusing, micro cuvettes and high sensitivity. It can record accurately analysis curve.

#### **Supply with original calibarator**

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 theromstatic apparatus

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









#### ▶ 6 Items Of Human Oriented Design, Convenience, Speed and Reliability

#### **Accurate Principle of Methodology**

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 turnable, 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 B-way and rotating distribution control valve. It is reliable for use and easy for maintenance.



#### **5µL** whole blood, three step test, for both labs and clinics

5µL whole blood, simple pretreatment the whole blood sample can be tested on instrument after whole blood sample is added with hemolytic agent through three step simple operation. Both venous blood and peripheral finger blood can 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.







#### **Basic Parameters**

Testing Method	Low pressure ion exchange liquid chromatography
Testing Item	Glycated hemoglobin HbA1c
Testing Scope	3% - 18%
Testing Parameters	Precision (CV) £ 3%, Accuracy (V) £1.50%
Testing Time	4 minutes (reporting), Full-processing 6 minutes (Including cleaning column and recovery time)
Testing Type	Various 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
Sample Volume	5μl whole blood for each sample
Thermostatic Control	Column and reagent thermostatic control : 25 ± 0.5 C
Reagent Matching	One place 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	320 x 240 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	AC 220V ± 22V 50HZ 65VA
Size	408MM X 390MM X 230MM
Weight	8 Kg
Working Environment	Temperature 12°C - 30°C, Relative Humidity £ 85%

#### Regulatory compliances



#### Corporate Social Responsibility



Analytical Foundation is a Nonprofit Organization (NGO) found for the purpose of:

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- 2. Improving quality of life by offering YOGA Training courses, Work shops / Seminars etc.
- 3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of Yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

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