TOSOH

HLC-723® GR01

Compact with **Big Impact**



TOSOH BIOSCIENCE

Better Diagnostics For Better Living

GR01

THE COMPACT HbA1c ANALYSER WITH BIG IMPACT

By enhancing laboratory productivity and upholding the highest standards of quality, the GR01 ensures your laboratory stays ahead in clinical excellence. Designed to set new standards, the GR01 combines user-friendly operation with robust reliability, offering advanced performance and a strong return on investment.





GR01 Ensures Your Lab Stays Ahead in Clinical Excellence



The GR01 analyser features one of the fastest haemoglobin separative methods in the market, delivering consistency in HbA1c results.

Beyond diabetes management, it provides added clinical value through precise detection of haemoglobin variants.

IMPACT ON PRODUCTIVITY

FLEXIBLE AND EASY TO USE

Tosoh's Redesigned HbA1c Analyser: Empowering Healthcare Professionals

The GR01 boasts **faster processing times,** enabling laboratories to handle a higher volume of tests without compromising accuracy. By prioritising ease of use, Tosoh has set a new standard in HbA1c analysis, empowering healthcare professionals to deliver timely and reliable results. This commitment to innovation not only enhances **operational efficiency** but also ultimately improves patient care.

Effortless Operation and Usability

The GR01 features

- State-of-the-art, Windows OS high resolution colour touchscreen interface for **intuitive usability**.
- Its compact benchtop design minimises space, while the ability to load a **double set of eluents adds convenience and extended walk-away time.**
- The analytical column and pre-filter holders are designed for fast and **error-free change,** and priority samples can be processed quickly by using the STAT sample position.



GR01 with the double line buffer configuration

IMPACT ON PRODUCTIVITY

RELIABILITY AND TRACEABILITY

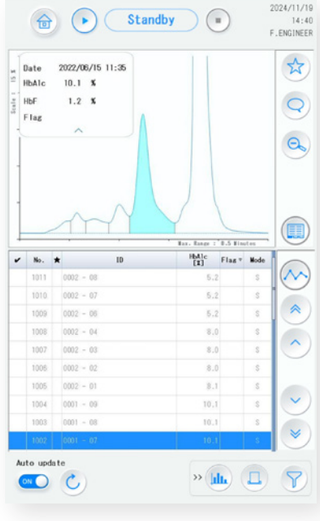
Every reagent used on the GR01, from columns to eluents, has its batch number and expiration date tracked via barcode scanning, ensuring **full traceability** of every result. Maintenance logs, including parts replacements and daily quality control results, are automatically recorded and and can be easily reviewed, ensuring a high level of traceability and **reliability** in your laboratory. The instrument and column performance are **continuously monitored,** with customisable flags that alert you as needed, ensuring prompt response when required.

Easy Reviewing

With a large, adjustable and ergonomic **touchscreen,** the GR01 makes **reviewing** of **patient chromatograms** very easy. The system can store up to 150,000 results internally, which can be transferred to the host system in real-time or batches.

Impact on Productivity

- **Operations** efficiency
- **Seamless** user experience
- **Minimal** downtime





IMPACT ON EFFICIENCY

PRECISION AND ANALYTICAL PERFORMANCE

When the GR01 detects haemoglobin variants, it flags them in the short analysis mode and adjusts the results in the long mode. It supports calibration in both IFCC and NGSP units, **ensuring accurate and reproducible** HbA1c results.

Unmatched Performance and Flexibility

With the GR01, you can choose between **two tailored analysis modes:**

1. A rapid **30-second** routine HbA1c test with haemoglobin variants flagging.
2. A more comprehensive **50-second** test, which adjusts for common haemoglobin variants.

Both modes use the same column and elution reagents, enabling seamless transitions between both modes in seconds. **This flexibility** ensures you are equipped to handle any patient profile without compromising workflow efficiency.

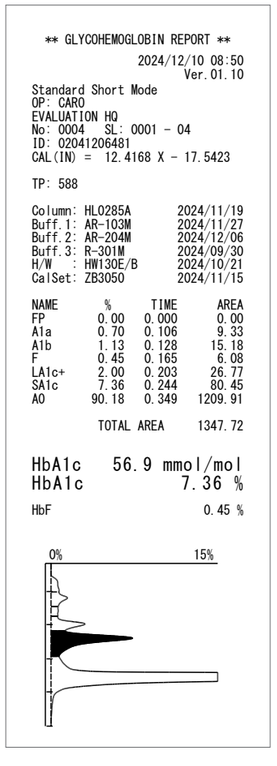
Enhanced Analytical Performance

Workflow	30 seconds / test in Standard Short Mode 50 seconds / test in Standard Long Mode
Flexibility	Quick switch between the 2 modes
Throughput	30 seconds with Hb variant presence flagging Up to 120 samples / hour
Performance*	Repeatability CV < 1 % Between-run CV < 1 % Between-day CV < 1 % Within laboratory CV < 1 %

Impact on Diabetes Management

- **Accuracy** without compromising on rapidity of execution
- **Analytical performance** with haemoglobin variants flagging
- **Clinical values** for better patient care

*Powered by the latest Ion Exchange HPLC gel technology, the GR01 offers unmatched separation capacity, ensuring **accurate results in HbA1c analysis.***



* Manita D, et al. Pract Lab Med. 2023; 38:e00346. doi: 10.1016/j.plabm.2023.e00346.

IMPACT ON CONNECTIVITY

TAILORED FOR YOUR EVOLVING LABORATORY NEEDS

Designed with growth in mind, the GR01 is adaptable to your laboratory's needs. Start with a **90-sample loader** and expand to a **290-sample capacity** as your testing volume increases.

Answering to rising demands, the GR01 easily integrates into your laboratory's **tracking line or haematology system**, offering scalability that grows with you.





GR01 with 290-sample loader





GR01 with front side connection

Designed with Growth in Mind

- **Scalability**
  90-sample loader or 290-sample loader
- **Haematology line connection**
- **Total Laboratory Track Automation**



GR01 with back side connection

IMPACT ON COST EFFECTIVENESS

RETURN ON INVESTMENT

The GR01 offers exceptional value with its low reagent consumption, minimal waste output, compact design, and nearly constant uptime. Its small footprint (less than 0.26 m²) saves valuable bench space, while reduced reagent use and quick analysis times ensure operational cost savings without sacrificing performance. Additionally, the GR01 allows **more tests** to be run with **fewer instruments**, further enhancing efficiency and value.

- HIGH THROUGHPUT
- INCREASED FLEXIBILITY
- SIMPLIFIED WORKFLOW
- OPERATIONS EFFICIENCY
- EXCELLENT SCALABILITY
- SEAMLESS USER EXPERIENCE
- RESULTS INTERPRETATION ASSISTANCE







- COMPACT DESIGN
- LESS HANDS-ON TIME
- QUICK RESULTS DELIVERY
- LOWER REAGENT CONSUMPTION
- MORE TESTS WITH LESS INSTRUMENTS
- MINIMAL WASTE OUTPUT
- MINIMAL DOWNTIME



IMPACT ON CUSTOMER SATISFACTION

UNRIVALLED CUSTOMER SERVICE



Customer Support

Tosoh's dedicated customer service and technical teams are **always ready to support you.** Our skilled engineers are equipped with the latest technologies to offer remote and on-site assistance, ensuring instrument uptime exceeds 99%. From order management to technical troubleshooting, Tosoh's support team is with you every step of the way.

Training Academy

Whether you are new to Tosoh or an experienced user, our training academy offers courses on everything from **basic operational skills** to in-depth discussions on **advanced** applications, helping you get the most out of your GR01.

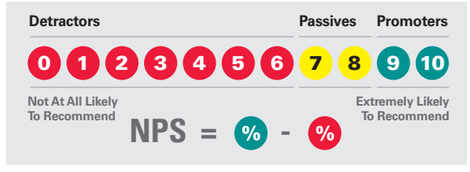
Committed to Sustainability

The GR01 is built with sustainability in mind. It uses less reagent for each analysis, reducing both biohazardous waste and disposal costs. The eluent bags fully collapse when empty, minimising solid waste, and the outer packaging is 100% recyclable. Tosoh is **committed to environmental stewardship,** ensuring our products align with sustainable practices supporting a greener future.

NPS SCORE OF 80%

With an impressive Net Promoter Score* of 80%, our customers demonstrate a high level of satisfaction with Tosoh's exceptional customer service and support.

** The Net Promoter Score (NPS) is a metric used by organisations to gauge customer loyalty to their brand, product, or service.*



COMPACT WITH BIG IMPACT

SPECIFICATIONS



Method	
Analyte	*HbA1c (%, mmol / mol)*
Applicable samples	*Whole blood and diluted samples*
Assay principle	*Ion exchange high-performance liquid chromatography*
Detection method	*2-wavelength absorbance (Detection wavelength: 415 nm / 500 nm)*
Calibration	*2-point calibration by calibrators*
Capacity	
Processing throughput	*30 seconds / sample (Standard Short Mode)*
	50 seconds / sample (Standard Long Mode)
Sampling volume	*3 µL for whole blood samples, 150 µL for diluted samples*
Sample rack	*10 sample tubes or cups per rack*
Sample loading capacity	*90 samples (when the GR-90SL is connected)*
	290 samples (when the GR-290SL is connected)
Sample barcode	*NW-7 (Codabar), CODE39, ITF, CODE128, JAN (UPC/EAN), Industrial 2 of 5, COOP 2 of 5, CODE39*
Software	
Display	*25 cm (10.1-inch) colour LCD*
Input	*Capacitive touch panel*
Storable number of samples	*Internal memory: Max. 150,000 samples*
	USB memory stick (optional): PDF report
Printer	*Internal printer: Thermal printer (paper width: 58 mm)*
	External printer: Monochrome laser printer (optional)
External output	*Serial communication (RS-232C)*
Temperature control (column)	*Approx. 25°C*
Data processing unit	*OS: Windows 10 IoT Enterprise LTSC*
Power supply	*AC100 to 240 V (±10%), 50 / 60 Hz*
Power consumption	*250 VA*
Dimensions	
Main unit and GR-90SL	*530 (W) × 515 (D) × 615 (H) mm*
Main unit and GR-290SL	*1120 (W) × 530 (D) × 615 (H) mm*
Weight	
Main unit	*Approx. 34 kg*
Sample loader (GR-90SL)	*Approx. 9 kg*
Sample loader (GR-290SL)	*Approx. 26 kg*

TOSOH

JAPANESE QUALITY AT ITS BEST

CHOOSE THE COMPACT HbA1c ANALYSER WITH BIG IMPACT

When you select the GR01, **you are choosing world-class productivity, quality, efficiency, and reliability in HbA1c analysis,** elevating your laboratory's performance to new heights.



Scan me

to discover the GR01 online

GR01

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