



TOSOH AUTOMATED GLYCOHEMOGLOBIN ANALYZER



# **QUALITY AND PERFORMANCE**

# **TOSOH BIOSCIENCE**

The G11 is not FDA cleared and is not available for sale in the US

# Fast. Accurate. Compact.

The Tosoh G11 HPLC Analyzer is a fast and compact HPLC analyzer that delivers accurate A1c results with variant detection. This user-friendly, low maintenance instrument is an excellent fit for laboratories of all types and sizes.



• Detailed result print-out in 60 seconds



- Column change in seconds
- Finger tight connection
- Proprietary non-porous resin packaging

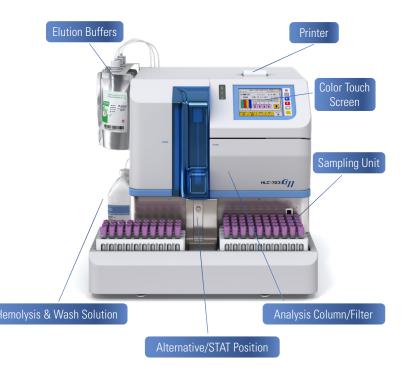


- Run priority samples
- Automatic sensing of tubes or sample cups
- Instruct the analyzer to increase or decrease dilution as needed

## One Touch Filter



- Advanced design for filter holder
- Simplified filter replacement



# **User-Friendly Operation**



- A1c result in 60 seconds
- Continuous loading
- 90 to 290 minutes in walkaway time

## **SECURE**



- Enhanced external data storage using USB memory stick
- Bidirectional LIS interface • Up to 5 user Log-ins with different priority levels

- SIMPLICITY
- One touch automated start-up and stop function

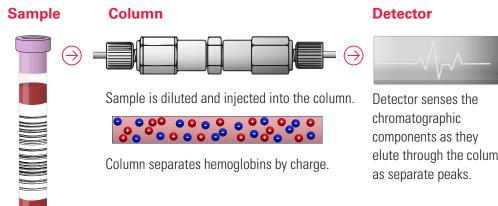
## WORKFLOW ADVANTAGES



- Reagent lot traceability (input Lot # and expiration date using handheld barcode reader)
- 30-day calibration reminder
- Automated cap piercing, closed primary tube sampling
- Positive sample ID
- No pretreatment of samples needed prior to running samples

# **HPLC** Technology

Tosoh's unique non-porous ion exchange HPLC column provides excellent resolution of peaks on the chromatogram.



## PERFORMANCE

- CV < 1%\*
- Reportability of A1c in presence of S, C, D or E variant traits
- Reportability of A1c in presence of HbF as high as 30%
- A1c measuring range: 2.7% to 20.1% (NGSP units)
- (Note: always follow good manufacturing practices)

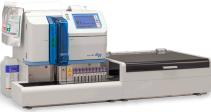
# **Instrument Configurations**



90 Sample Loader

# COMPACT BENCHTOP SIZE

- Small footprint analyzer with a 90 sample loader (W 21" x D 20" x H 19") that weighs 82 lbs
- Scalable to 290 sample loader (W 44" x D 20" x H 19") weighs 119 lbs
- Total lab Automation model available to place on Third party track line



## 290 Sample Loader

# QUALITY

- Calibration frequency once in 30 days

\*Data from G11 Instructions For use

elute through the column

• Gold standard HPLC technology High Resolution chromatography • Excellent peak separation • Direct determination of stable A1c in non variant specimens

\* GLYCOHEMOGLOBIN REPORT \* TOSOH 2020/02/10 14:13 0P:R00T V03.05 N0: 0026 SL 0001 - 03 ID: 0001 - 03 1.0659X + 0.7211 CAL(N) =TIME 0.00 0.17 0.24 NAME AREA 0.00 FP A1A 0.0 0.7 0.5 A1B 0.7 0.30 6.92 LA1C+ 0.38 13.43 SA1C 5.0 0.47 38.92 AO 93.3 0.70 895.14 TOTAL AREA 965.97 HbA1c 5.0% HbF 0.7 % 15% 0%

## **POWERFUL DATA MANAGEMENT**



Experience the power of the G11 when combined with the 501RP+ reporting middleware.

Refer to 501RP+ brochure for details.

### Chromatogram

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# **SPECIFICATIONS**

Analytes	HbA1c (SA1c), HbF, HbA1 (Total A1)
Principle	lon-exchange high performance liquid chromatography
	Visible two-wavelength absorption
Sample requirement	Whole blood or diluted blood (Preserved with EDTA)
Sampling volume	Whole blood: 3 µL
	Diluted blood: 150 µL
Throughput	1.0 minutes per sample
Data storage	On-board memory: up to 800 samples

### Main unit

Sampling	Cap-piercing of primary sample tubes
Whole blood	Automatic dilution by Hemolysis and
	Wash solution in the dilution port
Column oven	Thermomodule in aluminum block
Colulmn connection	Finger-tight type
Detector unit	LED colorimetric detector

### Sample loading units

Sample loading capacity	G11-90SL: 90 samples plus one STAT sample G11-290SL: 290 samples plus one STAT sample
Sample holding	10 samples/rack
Sample vial	12 -15 mm x 75 -100 mm primary tubes Tosoh sample cups
Barcode specifications	NW-7, CODE39, ITF, CODE128, JAN,

COOP 2 of 5, Industrial 2 of 5

### System control/Data processing

Display & Input	Liquid crystal display touch panel
Output	Thermal printer (roll paper), SmartMedia or LIS
Communication	RS-232C standard serial (bi-directional)
Operating temperature	15 - 30 ° C
Power requirement	AC 100 - 240 V, 50/60 Hz, 180 VA

### Dimensions/Weight 90SL model:

W 21" (530 mm) x D 20" (515 mm) x H 19" (482 mm) 82 lbs (37.0 kg) **290SL model** W 44" (1120 mm) x D 21" (530 mm) x H 19" (482 mm) 119 lbs (54.0 kg)

### Analysis Column



Elution Buffers (Variant Analysis Mode) and Hemolysis & Wash Solutions



# PART NUMBERS/DESCRIPTION

0023850	HLC-723G11 (Main Unit)	
0023851	HLC-723G11LA (Main Unit) *	
0023852	G11-90SL (90 Sample Loader)	
0023853	G11-290SL (290 Sample Loader)	
* Possible to connect with Laboratory Automation Belt line		

For more information about connecting to third party trackline and/or to 501RP+ reporting middleware, please speak to an associate.

### Consumables

Part Number Item Name 0023478 Column, G11, HPLC TSK Gel 0023479 G11 Variant Elution Buffer No. 1 (S) 0023480 G11 Variant Elution Buffer No. 2 (S) 0023481 G11 Variant Elution Buffer No. 3 (S) 0018767 Hemoglobin A1c Calibrator Set 0021974 Hemoglobin A1c Control Filter Element with flange 0023861 018431US Hemolysis/Wash Solution 018581US Sample Cups 0023862 G11 Thermal Printer Paper

Item Description Each 1 x 800 mL 1 x 800 mL 1 x 800 mL CAL(1), (2) (4 mL) x 5 each Level 1, 2 (0.5 mL) x 4 each 5/bag 1 x 2000 mL 1000/bag 10/box

### HbA1c Calibrator Set



HbA1c Control





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