G8 HPLC ANALYZER

Gold Standard Accuracy by Ion-Exchange HbA1c
HbA1c analysis in 1.6 minutes

Direct determination of stable HbA1c

Less than 2% CVs

Compact footprint - 21”w x 20”d x 19”h

Simple touch-screen operation

Automated daily maintenance

Flexible tube sizes
The significance of HbA1c for monitoring the glycemic status in the control of diabetes has increased with the continuing rise in the number of people with the disease.

From Tosoh, a world leader in HPLC technology, comes the latest model of glycohemoglobin analyzers: the Tosoh Automated Glycohemoglobin Analyzer HLC-723G8.

Providing fast HbA1c results, with CVs of less than 2%, the G8 is the perfect solution for improving diabetic patient care.
**Fast**
The time to first result is 3.5 minutes. Analysis time is only 1.6 minutes.

**Simple Operation**
- Touch screen
- Direct primary tube sampling/cap-piercing
- Automatic start-up
- No sample pre-treatment

**Feature Enhancements**
A new calibration check function utilizes a pop-up window to display standard values during calibration. Features also include a flag check function with user-selectable levels, buffer monitoring and an automatic prime function. Tosoh designed G8 functions from the user perspective, enhancing overall safety and convenience of operation.

**Gold Standard Technology**
Ion-exchange HPLC is the gold standard for HbA1c measurement. Ion-exchange HPLC was used in the DCCT* study undertaken in the United States.

*Diabetes Control and Complications Trial
**Accurate and Precise**

The G8 provides direct determination of stable HbA1c (SA1c) with less than 2% CVs. Through Tosoh’s development of a non-porous ion exchange HPLC column, HbA1c results are not clinically affected by the presence of most hemoglobin variants or hemoglobin derivatives.

**Compact Benchtop Size**

The instrument has a footprint of ~ 20 square inches and weighs only 75 lbs. The G8’s compact size makes it an easy fit into any location.

**Flexible**

A variety of different sized tubes can be loaded continuously. The operator can also run primary and secondary tubes in the same rack. The G8 easily adapts to changing laboratory workloads by offering a choice of either a 90 sample loader or a 290 sample loader. With the optional LA model linked via a sample belt line, no workload is too large.
SPECIFICATIONS

<table>
<thead>
<tr>
<th>Component</th>
<th>Description / Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytes</td>
<td>HbA1c (SA1c), HbF, HbA1 (Total A1)</td>
</tr>
<tr>
<td>Principle</td>
<td>Ion-exchange high performance liquid chromatography</td>
</tr>
<tr>
<td></td>
<td>Visible two-wavelength absorption</td>
</tr>
<tr>
<td>Sample requirement</td>
<td>Whole blood or diluted blood (Preserved with EDTA)</td>
</tr>
<tr>
<td>Sampling volume</td>
<td>Diluted blood: 90 µL</td>
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<tr>
<td>Throughput</td>
<td>1.6 minutes per sample</td>
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<tr>
<td>Data storage</td>
<td>On-board memory: up to 800 samples</td>
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</tbody>
</table>

Main unit

<table>
<thead>
<tr>
<th>Component</th>
<th>Description / Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling</td>
<td>Cap-piercing of primary sample tubes</td>
</tr>
<tr>
<td>Whole blood</td>
<td>Automatic dilution by Hemolysis and Wash solution in the dilution port</td>
</tr>
<tr>
<td>Column oven</td>
<td>Thermomodule in aluminum block</td>
</tr>
<tr>
<td>Column connection</td>
<td>Finger-tight type</td>
</tr>
<tr>
<td>Detector unit</td>
<td>LED colorimetric detector</td>
</tr>
</tbody>
</table>

Sample loading units

<table>
<thead>
<tr>
<th>Component</th>
<th>Description / Specification</th>
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</thead>
<tbody>
<tr>
<td>Sample loading capacity</td>
<td>G8-90SL: 90 samples plus one STAT sample</td>
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<tr>
<td></td>
<td>G8-290SL: 290 samples plus one STAT sample</td>
</tr>
<tr>
<td>Sample holding</td>
<td>10 samples/rack</td>
</tr>
<tr>
<td>Sample vial</td>
<td>12-15 mm x 75-100 mm primary tubes and Tosoh vials</td>
</tr>
</tbody>
</table>

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)

290SL model: W 44” (1120 mm) x D 21” (530 mm) x H 19” (482 mm)

114 lbs (51.5 kg)

175 lbs (79.0 kg)

PART NUMBERS/DESCRIPTION

021560  HLC-723G8 (Main Unit)
021561  G8-90SL (90 Sample Loader)
021562  G8-290SL (290 Sample Loader)
021955  TSKgel G8 Variant HSi (Analysis Column)
021956  G8 Variant Elution Buffer HSi No. 1 (S)
021957  G8 Variant Elution Buffer HSi No. 2 (S)
021958  G8 Variant Elution Buffer HSi No. 3 (S)
018431US  HSi Hemolysis & Wash Solution (L)
018767  Hemoglobin A1c Calibrator Set
992133  Hemoglobin A1c Control

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