Efficient operation combined with convenient use

- Fully automated system — no manual steps required during measurement
- Single cartridge containing all reagents needed for testing
- Precalibrated tests — no time-consuming calibration — cost saving
- Measurement of up to four tests from one sample
- Software available in several languages (ENG, GER, FRA, PORT, RUS, NOD)
- Additional languages available on request
- Intuitive software — no special knowledge needed
- Selectable units — no manual calculation
- Expandable parameter portfolio

Technical specifications

- Measurement principle: Photometric / Turbidimetric
- Barcode identification: Automatic barcode scan for reagents; Barcode scanner for samples optionally
- Thermostatic control: Measurement constantly at 37°C
- Connectivity: RS232 connection; USB connection via adapter
- Selectable units: e.g. for HbA1c mmol/l, % DCCT
- Dimensions: 200 mm (W) x 150 mm (H) x 170 mm (D)
- Weight: 4 kg
- User interface: 2.8″ colored touch screen

Handed over by:

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Germany

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Fax: +49 6432 9146-32
E-Mail: systems@diasys.de
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Precise, Flexible, Easy.
The New Dimension for HbA1c, CRP, Hemoglobin and Glucose POC Testing.
InnovaStar® – POC Testing at a New Level

Easy to use, superior precision, rapid results: InnovaStar® brings POC testing to a new quality level.

A fully automatic, compact analyzer for daily practice, providing the performance you would expect from a laboratory analyzer.

InnovaStar® represents a system where reagent and device perfectly match. The underlying technology and reagents in established DiaSys quality are identical to the ones used on clinical laboratory analyzers. As for lab analyzers HbA1c determination on InnovaStar® is carried out according to DCCT/NGSP and IFCC guidelines. These preconditions ensure high quality results with reliable precision.

Quick Guide

1. Sampling
   Take 10 µL whole blood with a capillary.

2. Preparation
   Place the filled capillary into the sample cup.

3. Mixing
   Close the lid and mix gently by inversion.

4. Loading slider
   Place the sample cup in position 1. Reagent cartridges are placed in any other position.

5. Measurement
   Inserting the slider starts measurement automatically. Results are available after 2 – 7 minutes (depending on the parameter).

InnovaStar® – The Flexible Solution

Efficiency will be a decisive factor in the physicians’ ability to confront future challenges such as the rapid rise in the number of diabetics. This requires fast and user-friendly instruments that produce precise and reliable results. InnovaStar® offers a broad range of superior features, guaranteed to make your daily routine much easier.

InnovaStar® processes whole blood, serum and plasma, depending on the parameter used. One decisive advantage of InnovaStar® is its ability to carry out multiple tests from a single 10 µL whole blood sample.

Benefits of the 4 in 1 Principle:
- High flexibility – individual configuration of up to 4 tests from 1 sample
- Less harmful for the patient – blood withdrawal only once
- Time saving and cost-effective – immediate results, no multiple visits

Precision in decision range

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DCCT (%)</th>
<th>DCCT mg/dL</th>
<th>IFCC mmol/mol</th>
<th>DCCT g/dL</th>
<th>DCCT mmol/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.6%</td>
<td>102 mg/dL</td>
<td>9.12 g/dL</td>
<td>3.1 g/dL</td>
<td>5.5 mmol/L</td>
</tr>
<tr>
<td>SD</td>
<td>0.06%</td>
<td>0.22 mg/dL</td>
<td>0.06 g/dL</td>
<td>0.20 g/dL</td>
<td>0.35 mmol/L</td>
</tr>
<tr>
<td>CV</td>
<td>1.44%</td>
<td>2.33%</td>
<td>1.22%</td>
<td>2.6%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Glucose/Hemoglobin as Two-In-One Test

As an additional feature, glucose and hemoglobin can be determined by using only one cartridge within a single run.

- Less harmful for the patient: Only one blood withdrawal for two analytes
- Quantitative Glucose and Hemoglobin results with high precision in one run
- Lower costs

Unique Features

Individual Hematocrit Correction
To ensure comparability of test results to laboratory analyzers InnovaStar® automatically provides a sample individual hematocrit correction for CRP and glucose. By this correction plasma values are calculated even if whole blood samples are used. Thereby, reliable results in laboratory quality are ensured.

Convenient Cartridge Use
- Filled with the same DiaSys quality reagents as for lab analyzers
- Identical technology as clinical chemistry analyzers
- Barcoded cartridges – no usage of expired reagents, automatic test recognition by barcode
- Pre-calibrated tests – no extra calibration costs
- Excellent calibration stability

Hemoglobin

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DCCT (%)</th>
<th>DCCT mg/dL</th>
<th>IFCC mmol/mol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring range</td>
<td>3 – 14%</td>
<td>9 – 130 mmol/mol</td>
<td>15 – 800 mg/dL</td>
</tr>
<tr>
<td>Specimen</td>
<td>Whole blood</td>
<td>Whole blood</td>
<td>Whole blood</td>
</tr>
<tr>
<td>Sample volume</td>
<td>10 µL</td>
<td>10 µL</td>
<td>10 µL</td>
</tr>
<tr>
<td>Time to result</td>
<td>2 min</td>
<td>6 min</td>
<td>2 min</td>
</tr>
<tr>
<td>Hematocrit correction</td>
<td>no</td>
<td>Yes</td>
<td>no</td>
</tr>
<tr>
<td>Traceability</td>
<td>IFCC, DCCT/NGSP</td>
<td>Reference method</td>
<td>GC-IDMS</td>
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Test characteristics

CRP

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<tr>
<th>Parameter</th>
<th>InnovaStar® vs. HPLC</th>
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<tr>
<td>CRP (mg/L)</td>
<td>0 2 4 8 10 6</td>
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n = 40; Passing / Bablok Regression: Y = 1.00 • X - 0.16%; r = 0.990

CRP

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<td>CRP (mg/L)</td>
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n = 92; Passing / Bablok Regression: Y = 0.986 • X - 0.252 mg/L; r = 0.996

Method comparison InnovaStar® vs HPLC

Method comparison InnovaStar® vs lab analyzer

InnovaStar® Laboratory Quality in its Most Compact Form

InnovaStar® represents a system where reagent and device perfectly match. The underlying technology and reagents in established DiaSys quality are identical to the ones used on clinical laboratory analyzers. As for lab analyzers HbA1c determination on InnovaStar® is carried out according to DCCT/NGSP and IFCC guidelines. These preconditions ensure high quality results with reliable precision.

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Hemoglobin: CRP

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