IH-1000 Fully Automated System for ID-Cards
IH-1000 is a revolutionary instrument for immunohematological diagnostics which can be used to execute a great variety of test procedures. IH-1000 combines three important features which are significant both for today and for the future:

- Highest level of security and flexibility with full automation
- Fast sample processing with continuous access
- Cost efficiency
Walk-Away

The **IH-1000** system is able to work independently for a minimum of 6 hours up to 9 hours (depending on the test profile).

- Card stock capacity for 240 ID-Cards - up to 20 different cards can be loaded at the same time
- Ability to load 28 reagent vials
- Loading capacity for up to 180 samples

Continuous System Access

Continuous sample and reagent loading.
System liquid can be refilled at any time while the system is processing.

Integrated Back-up System

**IH-1000** provides its own back-up system to ensure fast, automated sample processing at all times.

- 2 independent pipetting arms
- 3 centrifuges
- 2 integrated PCs

Immediate STAT Handling

The multi-module concept provides an immediate STAT function.
The multi-module concept ensures the highest range of flexibility in sample processing to be able to start emergency samples in a minimum time span.

Automatic Start Function

**IH-1000** is equipped with an automatic start function. Only 3 steps are necessary to process samples:

- Load ID-Cards and reagent vials
- Maintain system liquid
- Load samples
Reduced Time to Overall Sample Results

The IH-1000 system’s high flexibility makes it possible to perform strictly sample-oriented processing, dramatically reducing time to overall sample results.

Optimized for Small Volumes

With the special tubes for small blood volumes and pediatric samples, it is possible to work with a volume of just 50 µl.

Adjustable Touchscreen Monitor

The system is equipped with an adjustable touchscreen monitor mounted on a moveable arm.

The software is an intuitively designed, user friendly touchscreen interface.

Wireless Connection

IH-1000 is equipped with a state-of-the-art Wi-Fi connection for wireless computer connection.

Reagent Stock Management

All loaded reagents are actively monitored by the software. Resources lacking for additional loaded samples are displayed.

Automated Maintenance

All necessary maintenance steps are fully automated and controlled by the system.

Minimum user intervention is needed to perform maintenance on the system.
IH-Com

Data Management and Result Interpretation Software

IH-Com combines data, QC, sample and instrument management in one flexible software solution. Innovative software architecture developed around a patient oriented approach to result management, IH-Com links perfectly between Bio-Rad instrumentation and the LIS.

Main Features

- User friendly intuitive interface
- Only one connection to the LIS for all instruments
- Electronic lot documentation
- Long-term storage of patient results and images
- Automatic crosschecking with previous results

- Automatic back-up function
- Integrated QC module
- Manual workplace
- CE compliant according to IVD Directive 98/79/EC

IH-Com can be used with all pipetting automates, fully automated instruments and readers that Bio-Rad offers for immunohematology.

- Multiple instruments can be network linked through IH-Com, allowing single point access to patient information, worklists and results.

IH-Com collates all results associated with a patient identification and delivers an overall immunohematological interpretation. This includes confirmation tests and crosschecking with previous results.

IH-Com has an integrated and fully customizable QC module.

By applying a reagent lot oriented method it is possible to ensure that all products in use are performance controlled. The QC module is configurable in terms of frequency and type of test.

Result validation can be tailored to your individual requirements, including:
- Automatic validation
- Four eyes principle validation
- One-step validation

Results obtained from non-automated techniques are easily included via the manual workplace, a pioneering and specifically designed feature of IH-Com.

IH-Com

Additional modules available:
IH-AvID, IH-Web & BRiCare
Specifications

### Electrical Data
- **Voltage**: 100-240 VAC
- **Power fluctuation**: ± 10%
- **Transient overvoltage**: category II
- **Frequency**: 50/60 Hz
- **Power consumption**: 1,350 VA

### Environmental Conditions
- **Operating temperature**: 15°C to 27°C
- **Operating humidity**: 5% to 80% rh
- **Altitude maximum**: 2,000 m

### Dimensions
- **Width**: 173 cm
- **Height**: 170 cm
- **Depth**: 83 cm
- **Weight**: 540 kg

### Capacity
- **Samples**: 180
- **ID-Cards**: 240
- **Reagent vials**: 28

### Emissions
- **Heat emission**: 720 W
- **Noise level**: max. 65 dB(A)
- **Pollution level**: 2

### Test Methods
- Blood Grouping ABO/D
- Phenotyping Rh/K
- Antibody Screening
- Direct Antiglobulin Test (DAT)
- Reverse Grouping
- Compatibility Tests
- Antibody Identification
- Single Antigen Testing

### Performance*

<table>
<thead>
<tr>
<th>Test Conditions</th>
<th>Samples/h</th>
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<tr>
<td>A, B, D, ctl/A, B</td>
<td>80</td>
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<tr>
<td>A, B, D, ctl/A, B + Ab screening I, II</td>
<td>144</td>
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<tr>
<td>A, B, D, ctl/A, B + C, c, e, K, ctl</td>
<td>56</td>
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<tr>
<td>A, B, AB, DVI+, DVI-, ctl + A, A0, B, O + C, c, e, K, ctl + Ab screening I, II, III</td>
<td>36</td>
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</tbody>
</table>

*Performance data may vary depending on the loading sequences and requested sample profiles.

### Ordering Information

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>001000</td>
<td>IH-1000 including IH-Com Kit Fullversion</td>
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<tr>
<td>1209844</td>
<td>IH-AHID, Integrated Antibody Identification Software</td>
</tr>
<tr>
<td>009030</td>
<td>IH-Web, Remote Result Management Software</td>
</tr>
<tr>
<td>2000050</td>
<td>BRCare, Remote Service and Support Software</td>
</tr>
</tbody>
</table>

### Main Features
- Walk-away
- Stand-alone system
- Continuous sample loading
- Continuous reagent vials loading
- Immediate STAT handling
- Optimized for small blood volumes
- 17” touchscreen monitor
- Internal & external validation
- Only one connection to the LIS through IH-Com
- CE compliant according to IVD Directive 98/79/EC


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