JEOL

SPINREACT

Solutions for Innovation

Medical Equipment

Clinical Chemistry Analyzer

BioMajesty™

JCA-BM6010/C

Clinical Chemistry Analyzer with micro volume technology

Compact and Efficient with Advanced Usability

Compact and Speedy

Compact analyzer for limited space

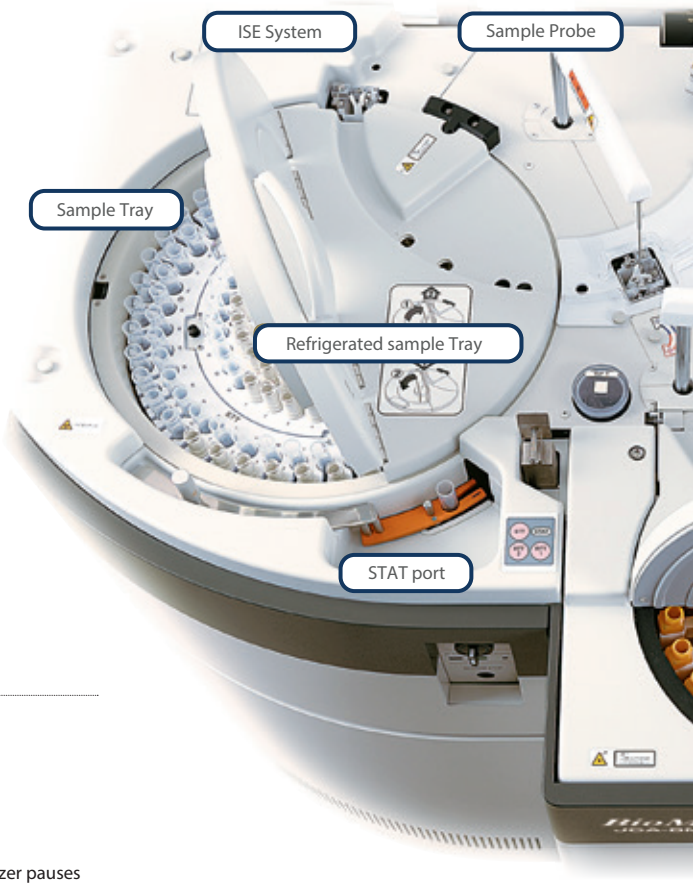
Maximum 800 tests/hour (photometric only)

Flexible and Easy Operation

STAT port

Smart Pause / Smart Start

On-board Hemolysis for HbA1c measurement



Easy STAT Analysis

STAT port

With one action, you can measure STAT sample. Set the STAT sample in the STAT port and slide the lever to the right.The sample ID will be scanned and the measurement will be executed.

Smart Pause / Smart Start

You can open and close the cover of Sample Tray (STT) without opening the top cover. The analyzer pauses sampling when STT cover is opened. You can add new samples and simply close the cover to restart sample analysis.

Sampling

1 µL sampling has been realized by fine-tuned Sample Probe and unique sampling method.

• Clot detection (Clot sensor)

Clot sensor monitors the pressure of aspiration for each process such as sampling, dispensing and washing to detect clot in the probe.

Reagent Tray (RTT)

The standard size for reagent bottles is 40 mL.
20 mL and 70 mL reagent bottles are also available with special adaptors.

• Built-in Barcode Reader

You can set reagent bottles in any positions on the Reagent Trays. By reading reagent barcodes, the analyzer automatically recognizes the expiration date and bottle size for each reagent.

• Automatic Reagent Bottle Switch

Multiple reagent bottles can be set for a frequently ordered test on the Reagent Tray. Automatic calibration after reagent bottle switch is also available.

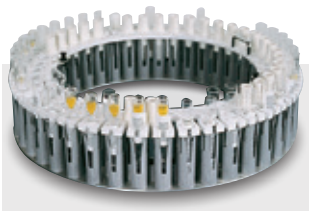
Sample Loading

• Sample Tray &STT (two outer rows)

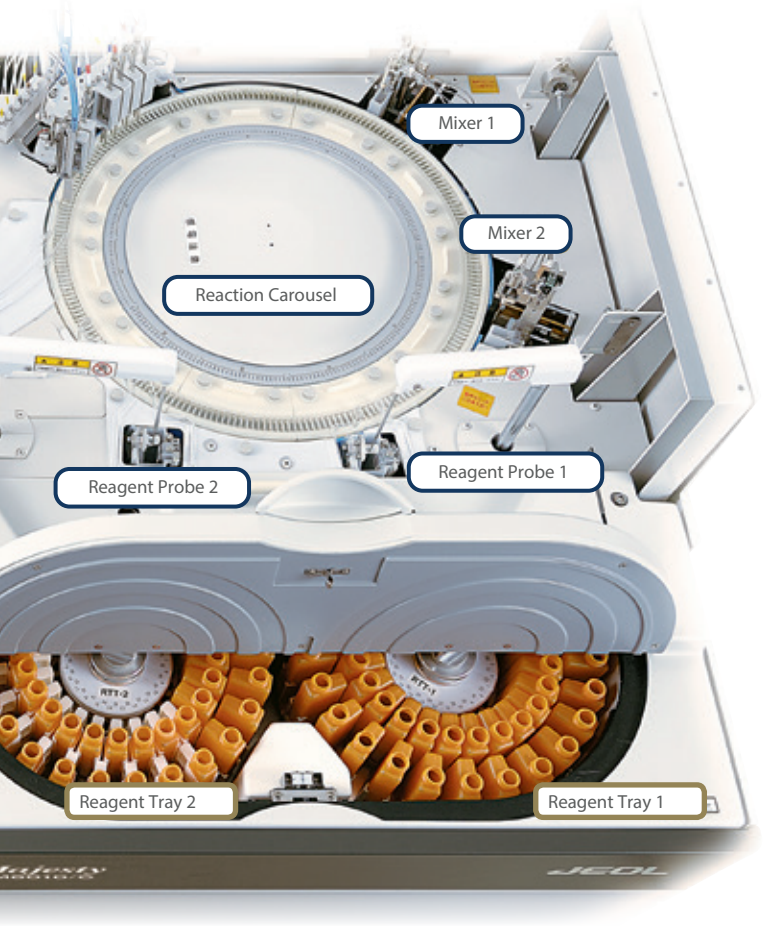
Sample Tray has a capacity of maximum 84 samples for routine samples and priority samples.
Priorities can be assigned for the samples to optimize the laboratory workflow.

• Refrigerated Sample Tray &CTT (two inner rows)

Refrigerated Sample Tray (CTT) accommodates 61 samples.
It can hold control, calibrator and the wash solution at the same time. Flexible random-access sampling is available.



Inert oil, used as Reaction Bath Oil, provides stabilized optical path and lower temperature gradients and eliminates air bubbles. In addition, the inert oil prevents stains and odors; therefore no maintenance is required for the Reaction Bath.

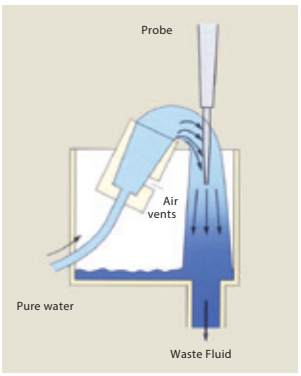


ISE Unit

Using the ISE (ion-selective electrode) system, you can measure the concentrations of Na^+, K^+, and Cl^- in serum, plasma, and urine.
(Simultaneous measurement of three ions : Na^+, K^+, Cl^-)

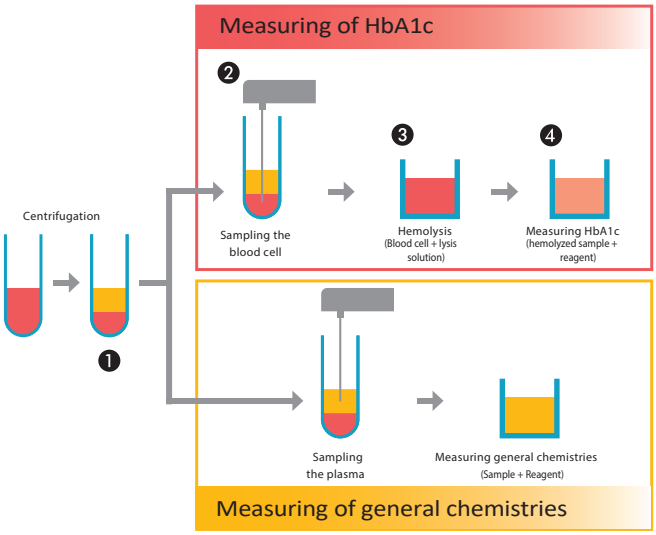
Washing Sample Probe

The sample probe is designed to reach in the lower part where the blood cells are.
During washing, the probe descends 60 mm from the tip in the washing port to wash the outer side of the probe.



HbA1c Measurement

JCA-BM6010/C realizes walk-away HbA1c analysis with on-board hemolysis. HbA1c measurement is performed using blood cell aspirated from the bottom of the sample tube, whereas the other general chemistry assays are performed using plasma aspirated from the upper part of sample tube. Thus, JCA-BM6010/C realizes simultaneous measurement of HbA1c and general chemistry from the same sample.

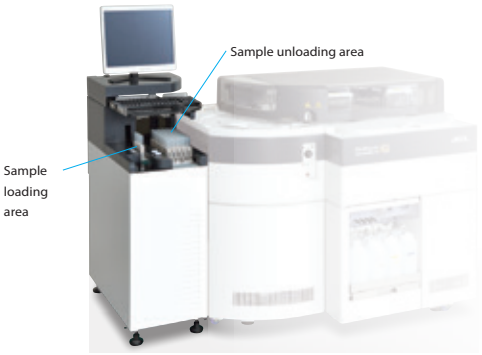


Procedure for the HbA1c measurement

1. Set the centrifuged sample on the sample tray.
2. The blood cell from the lower part of the tube is aspirated by the sample probe.
3. To hemolyze the blood sample, blood cell and lysis solution are dispensed and mixed in the reaction cuvette.
4. The hemolyzed sample is added to reagent dispensed in the next reaction cuvette.

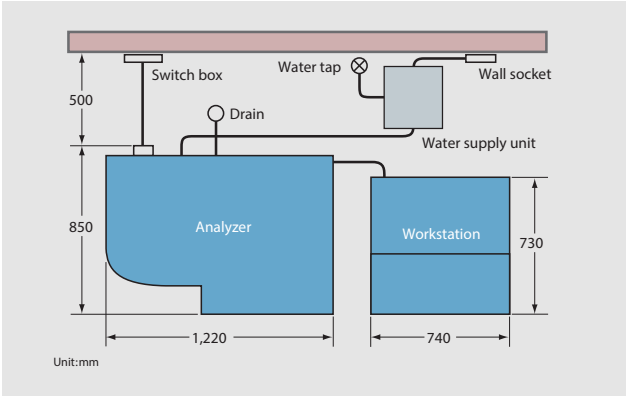
Rack Handler (Optional)

Model name	RAmini
Sample loading	15 samples (3 racks)
Sample unloading	65 samples (13 racks)
Racks	Dedicated 5 position rack from JEOL
Rack types	Per sample category (Patient sample, calibrator, and QC sample)
Barcode	CODE39, NW7, ITF, JAN
Size	Dimensions: 1,580 (W) × 1,090 (D) × 1,110 (H) mm Weight: 98 kg



RAmini

Example of installation layout



Specifications

Model name	Automatic Analyzer JCA-BM6010/C
Measurement method	Open discrete Reagent Pickup type
Throughput	Throughput: Maximum 1,200 tests/hour Photometric: Maximum 800 tests/hour ISE: Maximum 600 tests/hour
Sample throughput	Maximum 800 samples/hour (Maximum 400 samples/hour for the HbA1c measurement due to hemolysis step)
Simultaneous measurements	Maximum 50 assays (53 assays with ISE)
Analysis methods	Photometric method, reaction rate assay (RRA), CRA method, IMA method and more
Sampling	
Sample Tray	STT: 84 sample positions with Built-in Barcode Reader (Class 2 Laser) CTT: 61 Refrigirated sample positions
LAS	Point-in-space Sampling for LAS
Sample dispensing volume	1 to 25 µL/test (0.1 µL/step)
Dilutions	1:1 to 1:300 (1:1 to 1:200 for the HbA1c measurement)
Sensors	Liquid-level sensor, clot sensor
Reagent	
Reagent dispensing	1-3 Part Reagent Capability
Reagent Tray	2 trays refrigerated with Built-in Barcode Readers (Class 2 Laser)
Reagent container	20 mL, 40 mL and 70 mL
Reagent volume/assay	5 to 300µL (0.1 µL /step)
Reaction Carousel	
Reaction cuvette	Plastic, light-path length: 10 mm
Reaction volume	80 to 430µL
Reaction time	3, 4, 5, 10 and 15 minutes (can be set per assay)
Reaction temperature	37±0.1 °C
Reaction bath	Temperature-controlled reaction bath with inert oil
Mixer	SSR-Spin Mixer
Measurement method	
Measurement points	Maximum 63 points (Every 13.5 seconds in 15-minute reaction)
Measurement wavelengths	340 to 884 nm (14 wavelengths), 1 or 2 wavelengths for calculation
Maintenance	Automatic startup and shutdown by timer
Workstation	PC, LCD color monitor
Host interface	RS232C
Size	Dimensions: 1,220 (W) × 850 (D) × 1,108 (H) mm Weight: 450 kg

* Other trademarks referenced in the catalog are the property of our allied companies.
* Specifications subject to change without notice.
* This product is a Class 2 Laser Product.

Distributed by SPINREACT S.A.U.
Ctra. Santa Coloma, 7 | E-17176 Sant Esteve de Bas, Girona (ESPAÑA)
Tel: +34 972 69 08 00
www.spinreact.com | spinreact@spinreact.com

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