BiOLiS SERIES

BiOLiS 24i Premium

Automated Clinical Analyzer

TOKYO BOEKI MACHINERY

LABORATORY SOLUTION

BIOLIS 24i Premium

Improved ease of operation and better test efficiency,
and provides the optimal solution for routine operations,
STAT operation and a broad range of clinical analysis requirements.

The newest Software makes it possible to take usability a step further

The renewal of user friendly software

New convenient functions are available, such as check for inappropriate calibration results by flag indication compared to the previous results, and capability of using multiple bottles of the same reagent item on the same tray, etc.

Friendly user-interface

Real-time display of analysis process, reagent residual volume and so on.

Sharp reduction of reaction volume

Improvements to the optical measurement system have reduced reaction volume by maximum 30% compared to the former model, BIOLIS 24i.

Sample volume reduction

Analyzer can test small volume samples (around 50 μℓ), effectively, such as those obtained from the elderly or infants.

Night shift mode operation

Night shift mode enables simpler test.

Simple reagent management

Automatic reagent residual volume calculation system allows display of real-time residual volume percent.

LAN connection

Can be connected to an electronic chart of hospital LAN. (Option)

Low noise

Operation noise is reduced by around 20% compared to BIOLIS 24i.

BIOLIS 24i Premium

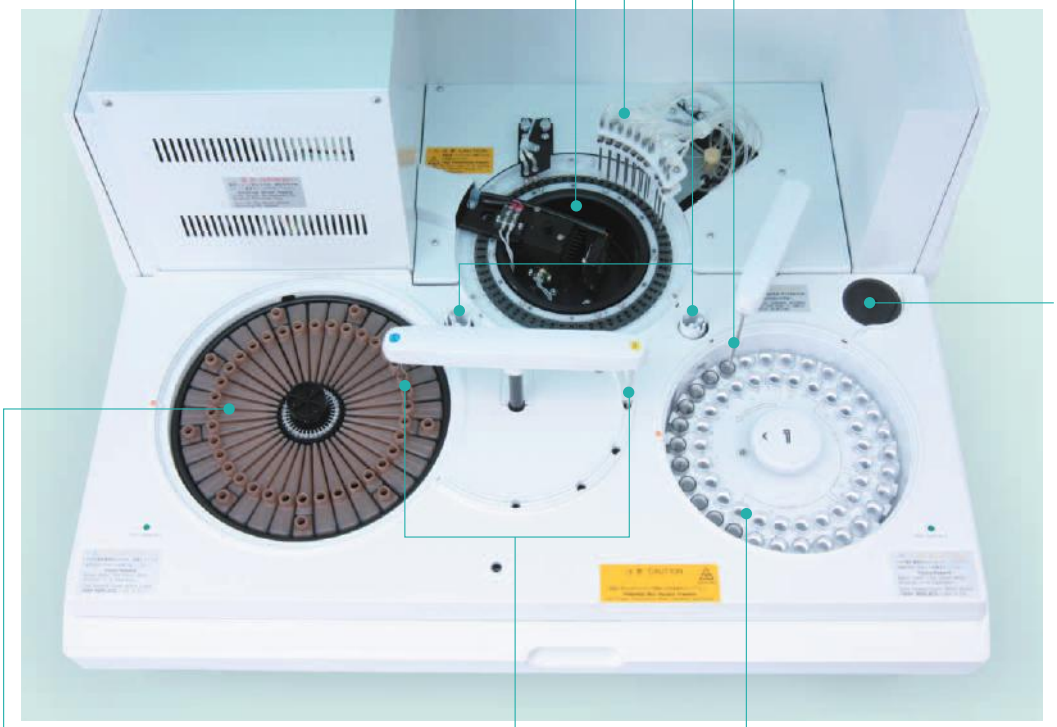
Accuracy features

- Individual probes are used for 1st and 2nd reagents to avoid carry-over.
- Sample pre-dilution ratio and auto-rerun dilution ratio can be set in advance.
- Carry-over protection program for reaction cuvettes and probes.
- Detecting function for contaminated reaction cuvettes are available.
- Reagent cooling is available.
- Reaction cuvette washing with heated water and 2 kinds of washing solution (alkaline and acidic) and heated water washing for all probes.

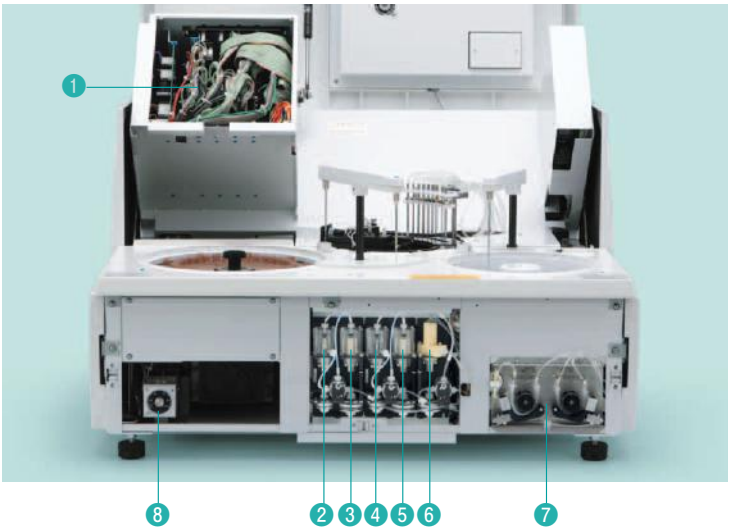
Operation features

- Sample cup and primary tube (5, 7, 10 mℓ) can be used.
- Auto-gain function when lamp is replaced.
- Reaction waste is stored in a dedicated tank.
- Test result data are compatible with BIOLIS 24i.
- Sampling-stop function using END barcode is available.
- Data base control function is available.
- Improved error list is displayed (compared to BIOLIS 24i).
- Liquid level alarm for water reservoir and waste liquid reservoir is available.

Main unit arrangement



Front view

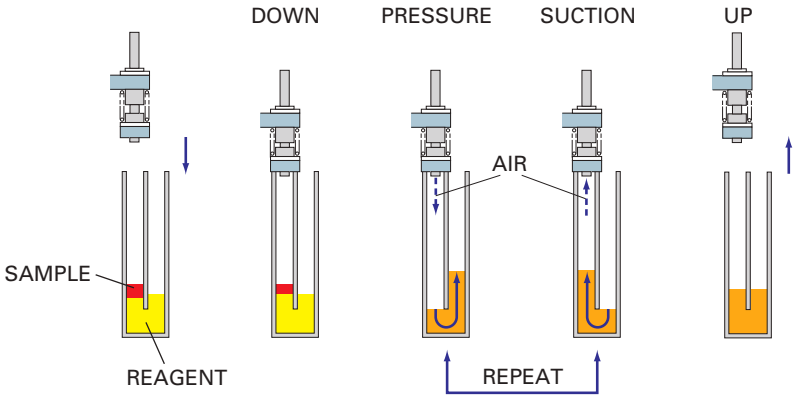


1. Control PCB
2. Reagent pump
3. Reagent probe inside washing pump
4. Sample pump
5. Sample probe inside washing pump
6. Probe outside washing pump
7. Pump for ISE
8. Reagent tray temperature controller

Air pressure mixing system

- Our original system for mixing the sample and reagent using air pressure alone.

Reaction cuvette
- Specially developed to utilize air pressure mixing system.
- The material is water repellent plastic (Semi-disposable)



Advantages of Air Pressure Mixing
- No carry-over because a stirrer is not used
- No water consumption for stirrer washing
- No dilution of the reaction solution by washing water from the stirrer

ISE module (OPTION)

[A] ISE is Direct Method
- Throughput is 400 tests/hour including ISE.
- ISE module is equipped with BIOLIS 24i Premium.
- It makes easy to replace the electrode.

[B] Consumables of the ISE module as follows
- Calibrator
- Cleaning solution
- Electrode (Na, K, Cl, Ref)

Friendly User-interface

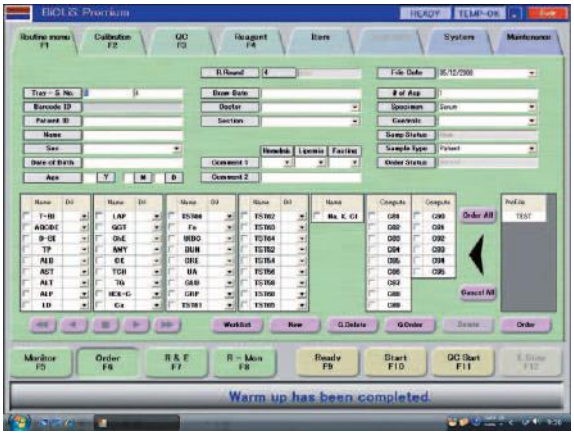
Renewal of User-interface

Readily understandable screen and ease of operation

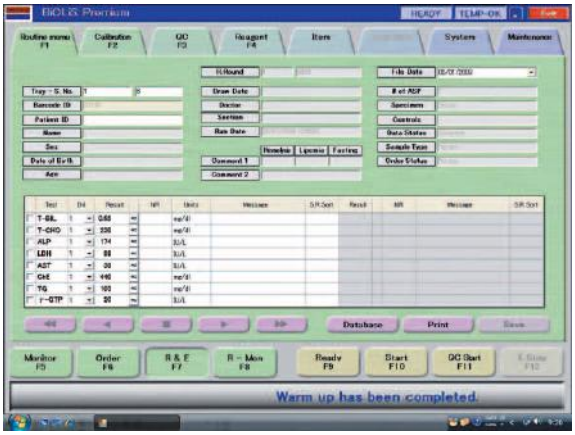
New functions

Automatic reagent residual volume calculation,
Current QC screen, Simple operation mode,
Soft sample tray mode, etc.

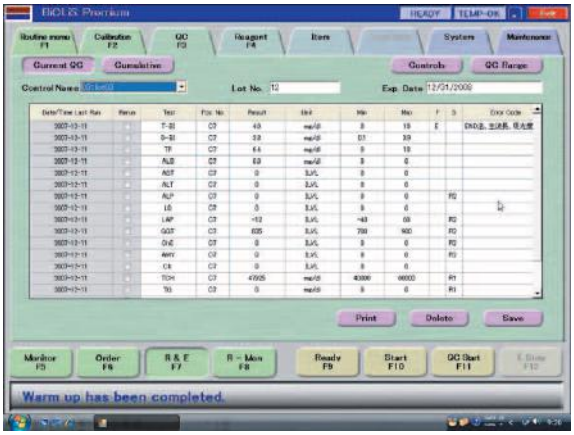
Run monitor screen



Order entry screen



Test results screen



QC screen

QC graph screen

Test items list

Clinical chemistry	LD(LDH) AMY LDL−C D-BIL GA Lp(a)	AST(GOT) P−AMY TP T-BIL CK−MB Fer	ALT(GPT) BUN ALB GLU Apo A-I μTP	ALP CRE Ca NEFA Apo A-Ⅱ NAG	γ-GTP UA IP PL Apo B μALB	CK(CPK) T−CHO Mg ALD Apo CⅡ HbA1c	LAP TG Fe SIA Apo CⅢ HBAO	ChE HDL−C UIBC TBA Apo E
Immuno-assay	CRP C4	RF Ig−G	ASO Ig−A	TPLA Ig−M	RPR Ig−E	β2-m	Tf	C3
TDM	BRP PHT	CBZ THEO	CSA VPA	DIG	DIGT	HAL	PB	
Coagulation	ATⅢ	APL	PLG	PC	FDP	D dimer		
ISE	Na	Cl	K					

Specification

Analysis	System type	Discrete single line random access multi-test analysis
	Number of test items on board	36+3 (ISE) or 24+3 (ISE)
	Throughput	240 tests/hour, 400 tests/hour including ISE
	Analysis method	End point assay, rate assay, ISE (option)
	Calibration curve	9 kinds (linear, spline, etc)
Sample	Sample kind	Serum, plasma, urine, CSF
	Sample container	Sample cup, primary tube (5, 7, 10 mℓ)
	Number of sample on board	Maximum 55/tray
	Number of sample tray	Maximum 10
	Sample dispense volume	2.0- 30.0 μℓ (0.1 μℓ step)
	Dilution ratio	6, 10- 100
	STAT sample	Available
	Sample barcode	Barcode reader supplied as an option
Reagent	Number of bottles on board	72 (36 items) or 48 (24 items)
	Bottle volume	13, 25, 40 mℓ or 20, 40, 60 mℓ
	Reagent dispense volume	20- 330 μℓ (1 μℓ step)
	Reagent storage	Reagent tray cooling available
	Residual volume	Level sensing or count down calculation
	Reagent tray	36-sectors or 24-sectors (Removable)
	Reagent barcode	Barcord reader supplied as an option
Reaction	Cuvette material	Plastics (Semi-disposable)
	Reaction volume	Minimum 140 μℓ, maximum 400 μℓ
	Reaction time	10 min. (1st reaction 5 min., 2nd reaction 5 min.)
	Reaction temperature	37.0 ± 0.1℃
	Optical measurement	12 fixed wavelengths (340 -800 nm)
	Optical source	Tungsten halogen lamp (Long-life type)
	Optical range	OD 0- 2.5
	Cuvette washing	Auto washing with heated water and 2 kinds of washing solution
	Reaction waste collection	Reaction waste to be stored in a dedicated tank
	Pure water consumption	Maximum 3.5 ℓ/hour
User interface	Run monitor	Analyzer operation status display
	Reaction curve monitor	Optical absorbance graphic display
	QC	Based on Westgard's algorithm, etc.
	Voice message	Available
	Test results storage	10,000 samples maximum
	Printer	Internal, External (option)
	Power supply	AC 100/115/230 volt (50/60 Hz)
	Environmental conditions	Ambient temperature 15- 30℃, Humidity 30- 80% (No condensation)
	Dimension	800 mm (w) x 670 mm (d) x 520 mm (h)
	Weight	Approx. 95kg
Option	ISE module	
	Sample barcode reader, Reagent barcode reader	
	Water purification system	
	External printer	

※Specification may change without notice due to modification

LABORATORY SOLUTION

REPRESENTED BY

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