BiOLiS 24i Premium

Automated Clinical Analyzer

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

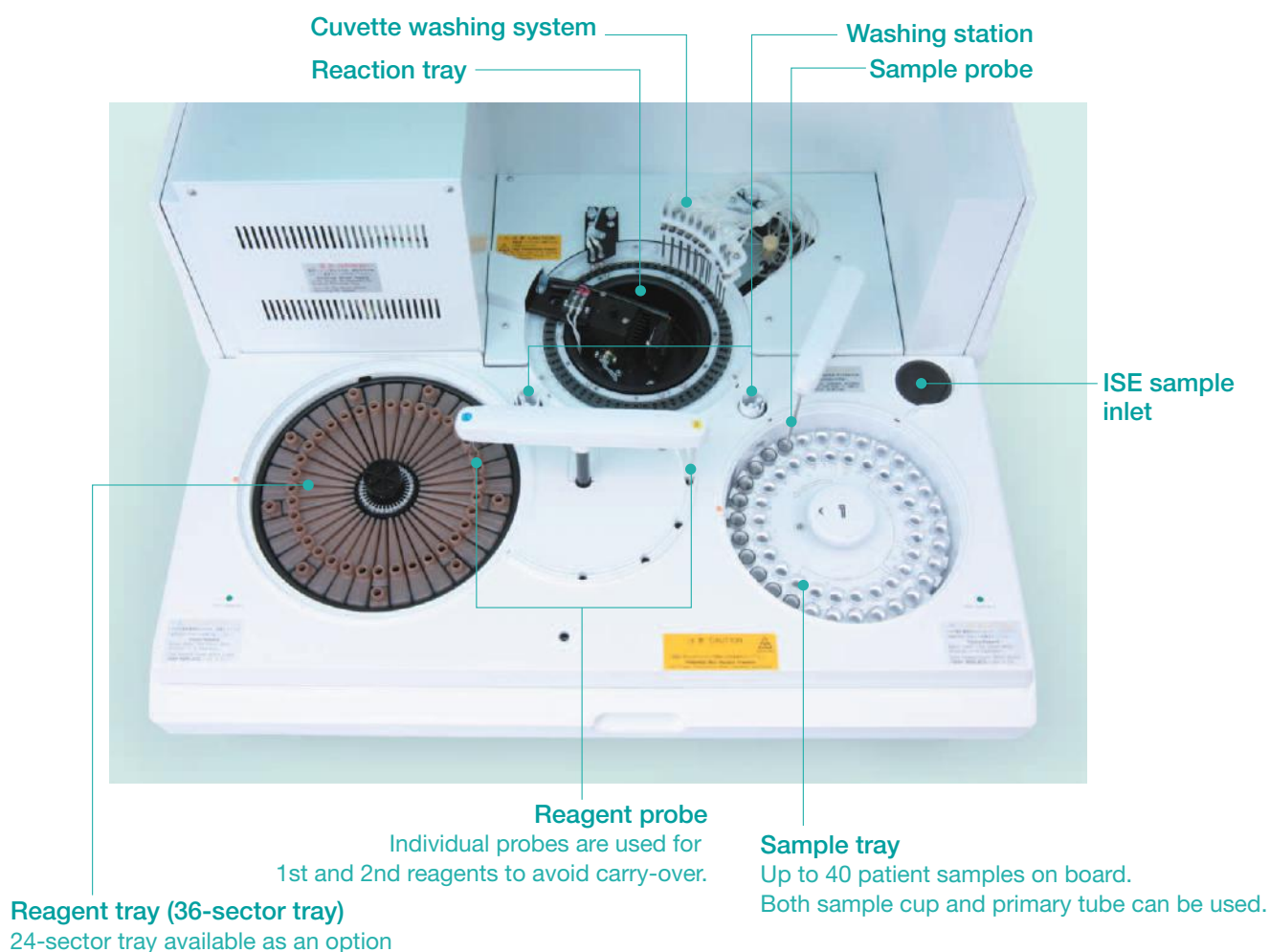Operation noise is reduced by around 20% compared to BIOLIS 24i.

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.
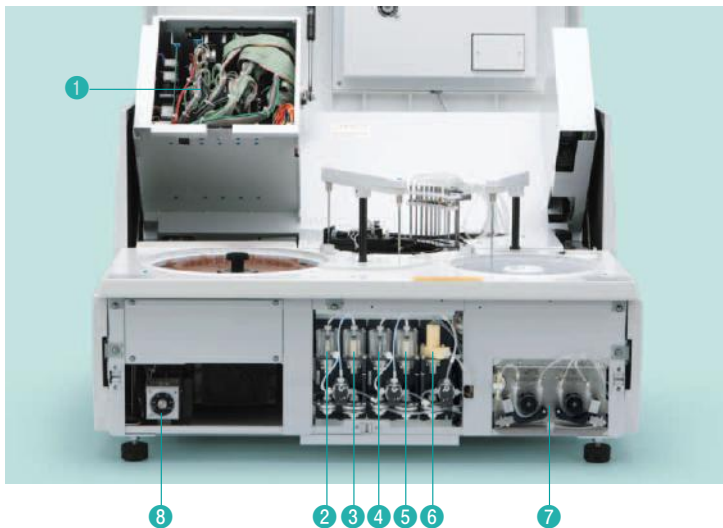
Operation features

- 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

Cuvette washing system

Reaction tray

Washing station

Sample probe

ISE sample inlet

Reagent probe
Individual probes are used for 1st and 2nd reagents to avoid carry-over.

Sample tray
Up to 40 patient samples on board.
Both sample cup and primary tube can be used.

Reagent tray (36-sector tray)
24-sector tray available as an option

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
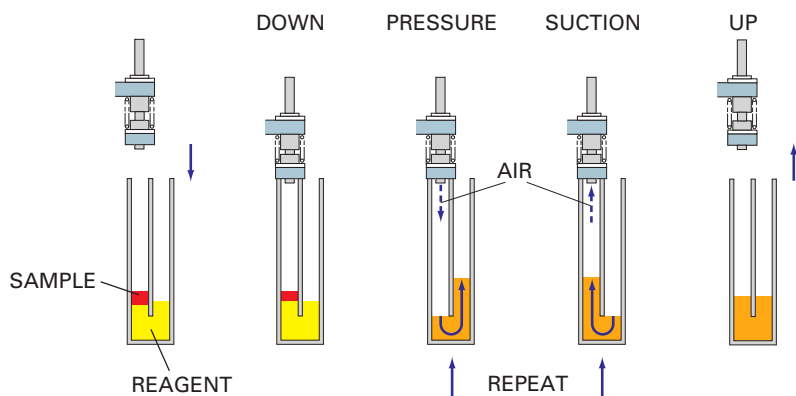7. Pump for ISE
8. Reagent tray temperature controller

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)

DOWN   PRESSURE   SUCTION   UP

SAMPLE

REAGENT

AIR

REPEAT

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

Distributed by:

**DIAGNOSTIC PRODUCTS
INTERNATIONAL, INC.**

Office Address:
**1395 South Marietta Parkway SE, Bldg. 200, Suite 234
Marietta, GA 30067-4628 USA**

Toll-Free Phone: **888-703-5558**

24-Hour Fax: **888-284-7518**

Website: **www.dpiparts.com**

Email: **info@dpiparts.com**