BA200

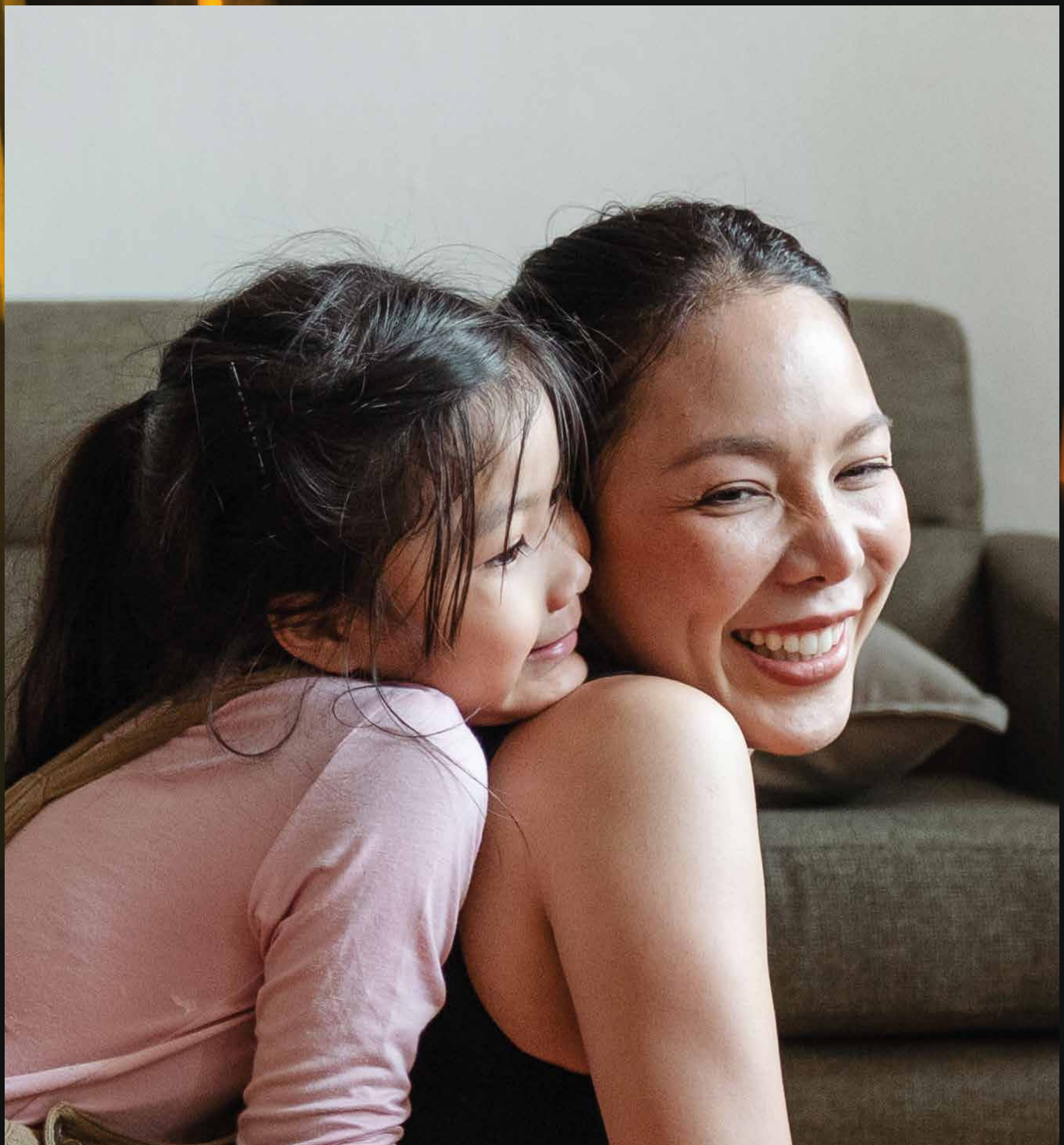
BioSystems

Automation and Flexibility

Clinical Chemistry Analyser

Clinical analysis

human - centred biotech



We understand your needs ensuring maximum flexibility and performace.

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BA200 analytical system: designed to enhance the laboratory workflow.


EA200
BioSystems

Technological innovation

The highest flexibility and compactness

A single rotor for samples and reagents allows maximum compactness without losing flexibility. The rotor layout is completely free to better fit the users' needs.

Highest performance, minimal maintenance

The optical bench is based on our patented LED technology, which requires the minimum maintenance and allows the longest lifespan. The LEDs performance also enables the throughput of 200 t/h.

Make your work easier

Automation saves time and avoids manual procedures. The new automatic hemolysis function guarantees more accurate results.

Reliable validated system

Reagents are specifically designed and validated to ensure robust and reliable results. The reagent barcodes and the volume detection system allow a completely control of the reagent used at any time.

Technical specifications

Highlights

- Throughput of 200 t/h (clinical chemistry and turbidimetry reagents).
- Maximum throughput of 300 t/h with ISE Module: Na^+, K^+, Cl^- and Li^+ (optional).
- High reagent and sample capacity (88 positons) with barcode reader, the highest grade in flexibility.
- Automatic hemolysis on whole blood samples.
- Reaction rotor washing station and continuous evaluation of cuvette status.
- Dynamic baseline with SMART LED Technology.
- Photometric range up to 3.5 Abs and optical resolution of 0.0001 Abs.
- Full-capacity to integrate into LIS (ASTM, HL7).

Ordering Information

Item	Code	Quantity
BA200 analyser/BA200 analyser with ISE module	83200/83200ISE	-
Wheeled table + computer support	AC17346	1 unit
Wheeled table	AC17345	1 unit
Reaction rotor	AC11485	10 units
Concentrated washing solution	AC16434	500 mL
Acid washing solution (WS1)	AC17201	4 x 20 mL
Alkaline washing solution (WS2)	AC17205	4 x 15 mL
Sample wells (pediatric cups)	AC10770	1000 units
Reagent bottles 60 mL + caps	AC16362	10 units
Reagent bottles 20 mL + caps	AC16363	10 units
Amber reagent bottles 60 mL + caps	AC16364	10 units
Amber reagent bottles 20 mL + caps	AC16365	10 units
ISE Module*		
Sodium Electrode (Na^+)	5201	1 unit
Potassium Electrode (K^+)	5202	1 unit
Chloride Electrode (Cl^-)	5207	1 unit
Reference Electrode	5204	1 unit
Lithium Electrode (Li^+)	5205	1 unit
Spacer Electrode	5206	1 unit
Reagent pack $Na^+/K^+/Cl^-/Li^+$	5420	1 unit
Urine diluent 125 mL	5412	125 mL
Urine diluent 500 mL	5408	500 mL
ISE Cleaning solution Kit	5421	1 unit
Bi-level quality control kit ($Na^+/K^+/Cl^-/Li^+$)	2814	1 unit
Tri-level quality control kit ($Na^+/K^+/Cl^-/Li^+$)	2815	1 unit

*If you want information about the ISE module consumables, contact us at customersupport@biosystems.es.

Throughputs

Throughput without ISE module	200 t/h
Throughput with ISE module	300 t/h

ISE module (optional)

Sample type	Serum, plasma or urine
Electrode type	Na^+, K^+, Cl^-, Li^+ (optional)
Sample volume	Serum: 100 µL / Urine: 200 µL

Sample handling

Sample rotor capacity	Up to 88 flexible positions
Barcode reader	Yes
Size of primary tubes	Diameter 12 mm to 16 mm (max. height 100 mm)
Sample well	13.5 mm diameter
Sample types	Serum, plasma, urine, whole blood, cerebrospinal liquid, semen and biological fluids
Dispensing mode	Ceramic piston pump with low maintenance
Pipetting volume	From 2 µL to 40 µL
Pipetting resolution	0.1 µL
Predilution ratio	From 1:1 to 1:200
Clot detector	Yes
Tip wash	Inside and outside

Reagent handling

Volume of reagent bottles	20 mL, 60 mL
Cooled reagent	Yes
Temperature range of refrigerator	From 6 to 11 °C (measured at 21 °C)
Barcode reader	Yes
Reagent volume R1	90 µL to 300 µL
Reagent volume R2	10 µL to 100 µL
Dispensing mode	Ceramic piston pump with low maintenance
Pipetting resolution	0.1 µL
Tip wash	Inside and outside

Reactions rotor

Reaction volume range	From 180 µL to 440 µL
Number of wells	120
Well material	UV methacrylate
Type of incubation	5 min. (fixed)
Temperature	37.0 °C
Temperature accuracy	± 0.2 °C
Number of mixers	1
Cuvette washing system	8 steps washing station

Optical system

Light Source	LED
Wavelengths	340 - 405 - 505 - 535 - 560 - 600 - 635 - 670 nm
Photometric range	-0.2 to 3.5 A
Internal resolution	0.0001 A
Measurement accuracy	CV <1% at 0.1 A
(for 340 nm, 405 nm and 505 nm)	CV <0.1% at 2 A

Dimensions

Size (w., d., h.)	1070 x 690 x 680 mm
Weight	166 Kg

Electrical and environmental requirements

Main voltage	115 to 230 V
Main frequency	50 or 60 Hz
Electric power	500 VA max.
Room temperature	From 10 to 35 °C From 10 to 30 °C (with ISE module)
Relative humidity	<85% without condensation
Altitude	<2500 m

Fluidic requirements

Water inlet	External tank or mains water supply
Water type	Purified type II
Water consumption	<9 L/h
Bottle of high concentration waste	2.4 L
Bottle of washing solution	2.4 L

Minimum computer requirements

Operating system	Windows® 10 64 bit (x64)
CPU	Equivalent to Intel Core i3 @3.10 GHz or higher
RAM	4 GB
Hard Disk	40 GB or higher
Monitor minimum resolution	1024x768
Connector of serial channel	USB

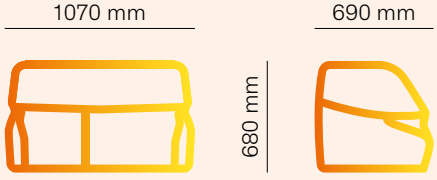
Laboratory Information Systems (LIS)

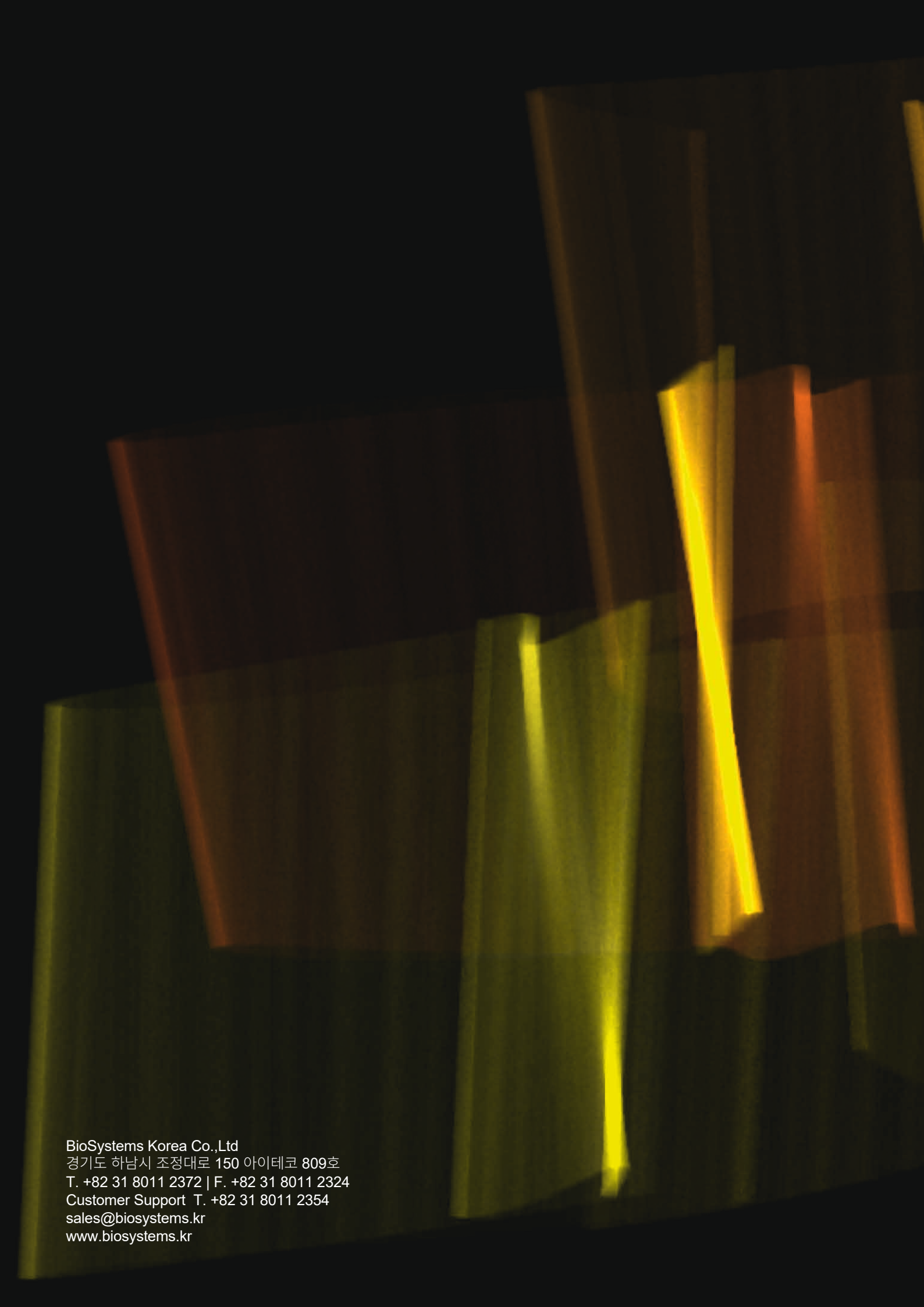
Connectivity to LIS	HL7 and ASTM protocols

Regulations and Standards Compliance

IVD Regulation (EU)	2017/746

Intended use: automated analyser for the measurement of analyte concentrations in human clinical specimens using *in vitro* diagnostics reagents. For *in vitro* professional use in the clinical laboratory only.





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