

BA200

LED TECHNOLOGY

The Highest
Flexibility

BioSystems
REAGENTS & INSTRUMENTS

We improve the well-being of people around the world

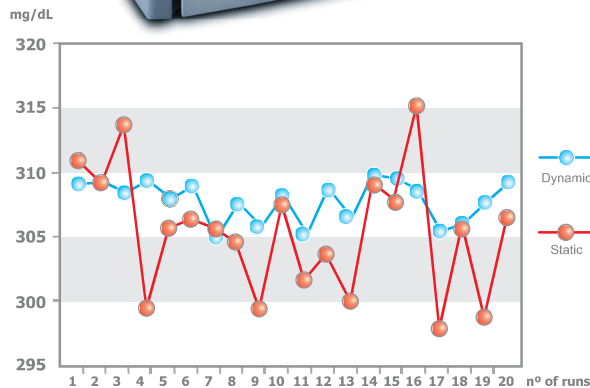


BA200

LED TECHNOLOGY

STAT and Routine Laboratories Benchtop Random Clinical Chemistry Analyzer

For 35 years **Biosystems, S.A.** develops IVD products at its facilities in Barcelona (Spain). The quality of our product, together with a personalized Customer Support have been and remain our main business philosophy. Through this experience we can now present our first benchtop analysis system with the most advanced technological features in electronics, design and reliability. With this analyzer, one more member is added to the BA family, which together with the BA400 offers a wide spectrum of attention to the clinical laboratory with an excellent quality / price ratio.



Dynamic Baseline LED technology

An improvement in cuvette blanking allows better reliability for low concentration samples as well as a better performance in CV



High reagent and sample capacity (88 positions), the highest grade in flexibility

Any position can be loaded either with a reagent bottle or a sample tube/pediatric well, (samples, controls or standards).
All of them fully accessible to barcode reader.



Barcoded dedicated reagents

The BA has several kit sizes suitable for high and low turnover.

Note: A brochure for the BA dedicated reagents is available.

Highly accurate dispensing

No extra consumption neither in calibrators, controls nor reagents.



120 - cuvette rotor with washing station

All 120 cuvettes are easily changed in only one step while all of them are optically checked.



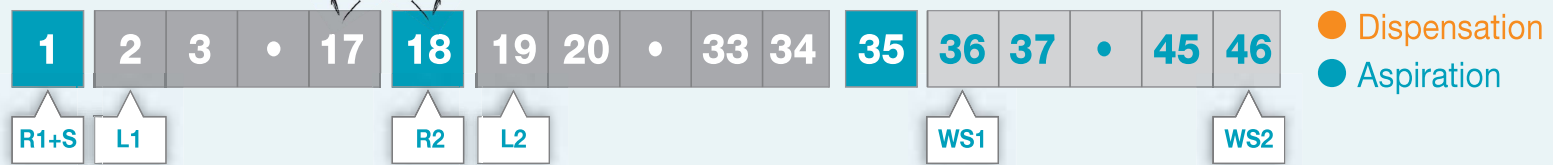
Compact system with low maintenance

No additional elements required to be connected out of the analyzer. Long durability pump and LED light sources maintenance - free.



When time matters, Real 200 t/h throughput

Even with double reagent reactions, the analyzer keeps its speed. Up to 4 volumes can be handled in every cycle.



BA200 machine cycle sequence: R1 and sample are both dispensed in cycle 1, not requiring additional time for R1 pre thermo

Technical specifications

General Performance

Throughput	200 test/h (without electrolytes)
Throughput ISE module	120 test/h (3 channels) 160 test/h (4 channels)
Principles of analysis	Colorimetry, turbidimetry, ISE method: Na ⁺ , K ⁺ , Cl ⁻ (Li ⁺ as optional)

Sample and reagent handling

Capacity of rotor	88 (44 bottles of 20 mL, 60 mL or sample tube + 44 bottles of 20 mL or sample tubes)
Barcode Detector	Yes
Sample tube size	Diameter from 12 mm to 16 mm (height up to 100 mm)
Pediatric well	13.5 mm diameter
Type of syringe	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
Level detection	Yes
Tip wash	Inside and outside
Clot detector	Yes
Vertical collision detector	Yes
Volume of reagent bottles	20 mL, 60 mL
Cooled reagent	Yes
Temperature range of refrigerator	From 6° C to 11° C (measured at 21° C)
Reagent volume R1	From 90 µL to 300 µL
Reagent volume R2	From 10 µL to 100 µL

Reactions rotor

Minimum reaction volume	180 µL
Maximum reaction volume	440 µL
Number of wells	120
Well material	UV methacrylate
Type of incubation	5 min (fixed)
Temperature reaction rotor	37 ° C
Accuracy of temperature	± 0.2 ° C
Temperature stability	± 0.1 ° C
Mixers	1

Cuvette washing system

Number of tips of washing system	7
Number of tips with washing solution	2
Rinsed with water	3
Dried tips	2
Wash volume per tip	711 µL
Consumption of washing solution	1.42 mL/cycle (=7.11 µL cws*)

* Concentrated washing selection AC16434

Optical System

Light Source	LED + Hard Coating filter
Number of wavelengths	8
Wavelengths	340 - 405 - 505 - 535 - 560 - 600 - 635 - 670 nm
Filters bandwidth	± 2 nm
Photometric range	-0.2 to 3.5 A
Internal resolution	0.0001
Detector	Main Photodiode + reference photodiode
Measurement accuracy	CV < 1% at 0.1 A
(for 340 nm, 405 nm and 505 nm)	CV < 0.1% at 2 A

ISE Module (optional)

Sample type	Serum, Plasma or Urine
Electrode type	Na ⁺ , K ⁺ , Cl ⁻ , Li ⁺ (optional)
Sample volume	Serum: 100 µL / Urine: 200 µL

Environmental Requirements

Ambient temperature	10 ° C to 35 ° C
Relative humidity	10 ° C to 30 ° C (With ISE module) <85% without condensation

Dimensions and weight

Dimensions (width, depth and height)	1077 mm x 690 mm x 680 mm
Weight	166 Kg

Electrical Requirements

Mains voltage	115 V to 230 V
Mains frequency	50 Hz or 60 Hz
Electric power	Max. 500 VA Average power: 260 VA

Fluidic Requirements

Water inlet	External tank or mains water supply
Type of water	Purified type II (NCCLS)
Water consumption	<9 L/h
High concentration waste tank	2.4 L
Washing solution tank	2.4 L



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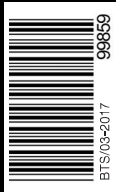
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Ginper Group



BioSystems

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- Certified Management System
- EN ISO 9001
- EN ISO 13485