



**BA200**  
LED TECHNOLOGY

The Highest  
Flexibility

**BioSystems**  
REAGENTS & INSTRUMENTS

We improve the well-being of people around the world

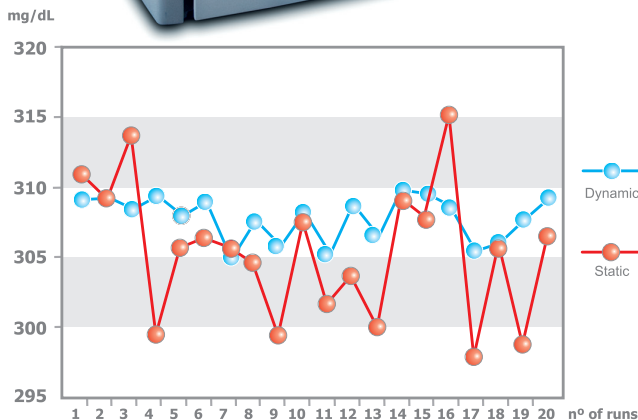




**BA200**  
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## STAT and Routine Laboratories Benchtop Random Clinical Chemistry Analyzer

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. The new BA200 joins 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 with SMART LED Technology

A new more precise measurement algorithm for cuvette blanking allows better trueness in samples of low concentration or catalytic activity along with an improvement in precision. Light intensity on each measurement is individually self-corrected before the reading.

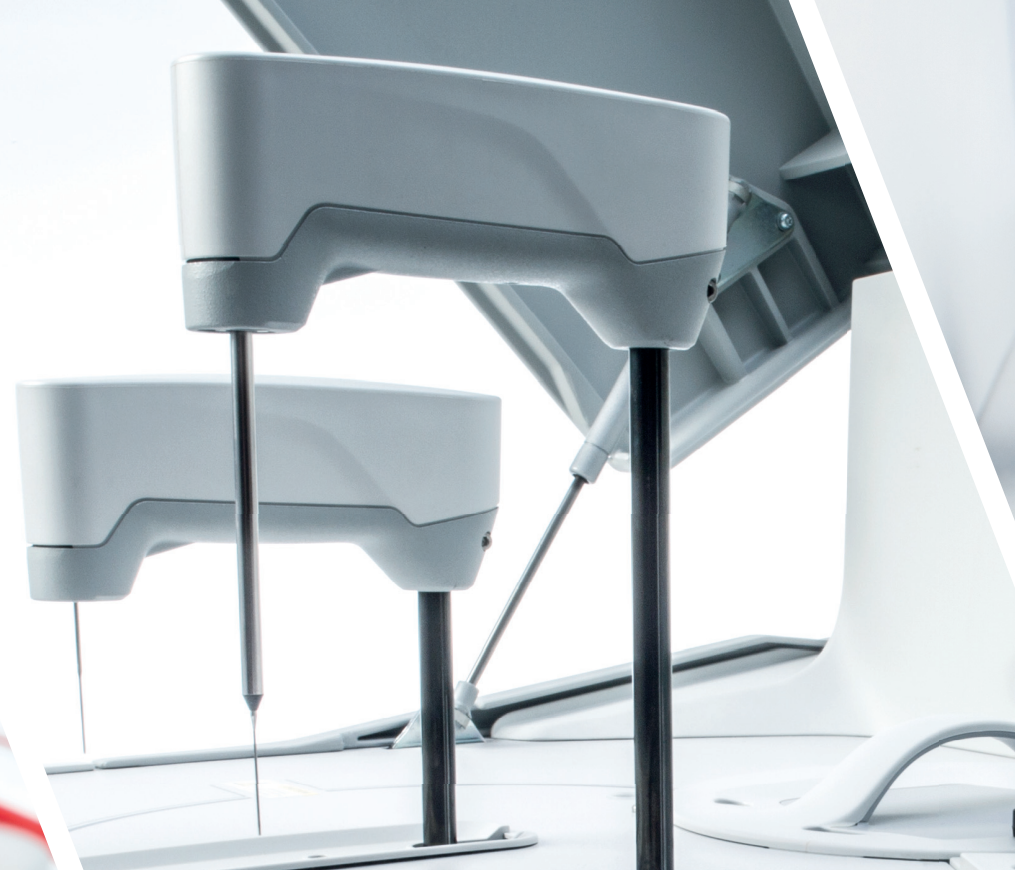


## High reagent and sample capacity (88 positions), the highest grade in flexibility

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

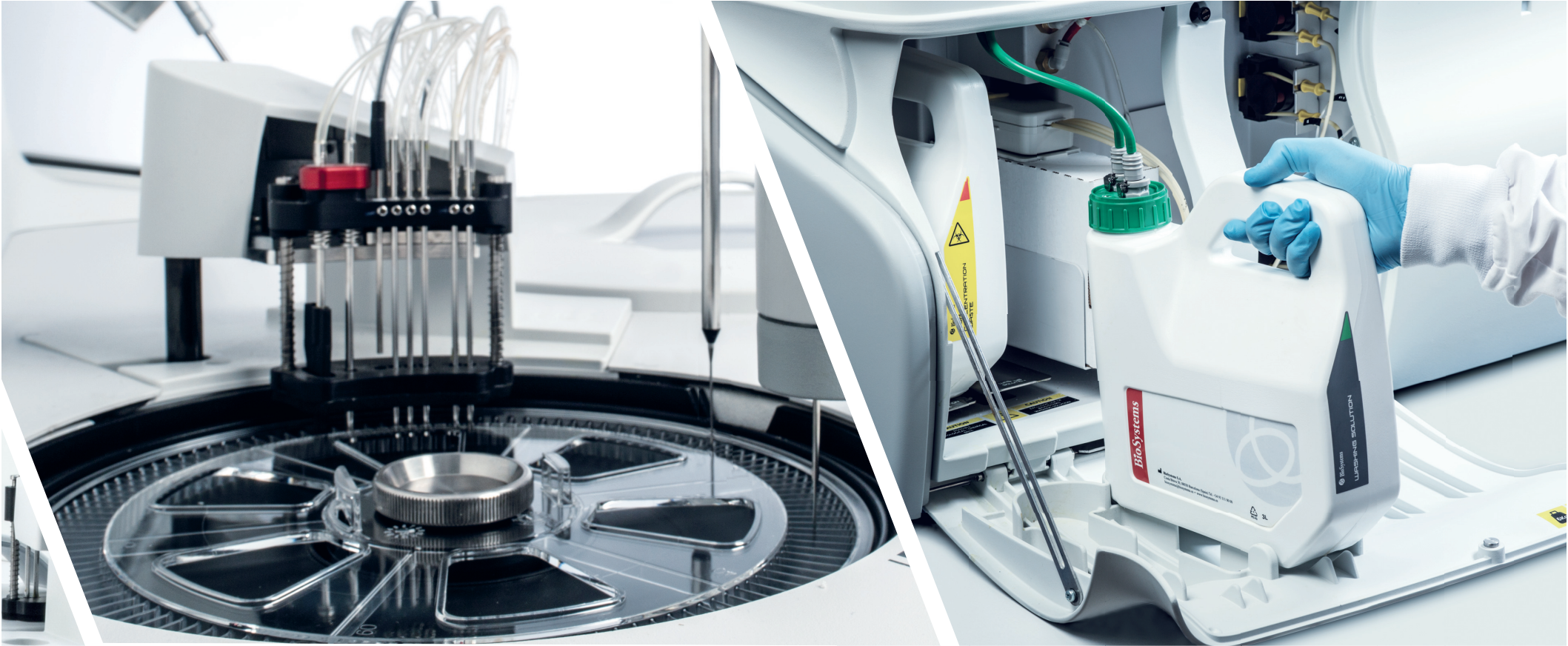
The BA has several kit sizes suitable for high and low turnover.

*Ask your local dealer for additional information.*

## Highly accurate dosing

Making the most of reagents with a precise control in consumption of calibrators, controls and reagents.





## 120 - cuvette rotor with washing station

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

## Compact system with low maintenance

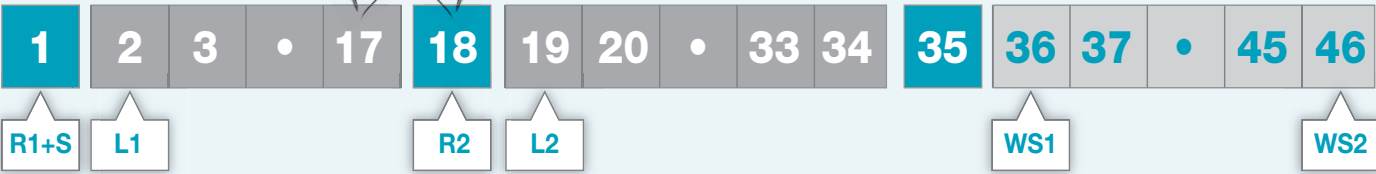
No additional elements required to be connected out of the analyzer. Long durability pump and LED light sources maintenance - free. Individual collection of High Contamination Waste. Up to 7h of continuous workload.





# 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.



● Dispensation  
● Aspiration

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



## General Performance

Throughput	200 test/h (without electrolytes)
Combined Throughput (ISE+Photometry)	267 test/h (3 channels) 300 test/h (4 channels)
Principles of analysis	Colorimetry, turbidimetry, ISE method:Na <sup>+</sup> ,K <sup>+</sup> ,Cl <sup>-</sup> (Li <sup>+</sup> 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
Dilution (Pre/Post) 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
Cooling Unit	Yes (Samples & Reagents)
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

Washing station type	7 step with drying
Consumption of washing solution	1.42 mL/cycle (=7.11 µL cws*)

\* Concentrated Washing Solution 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 (for 340 nm, 405 nm and 505 nm)	CV < 1% at 0.1 A CV < 0.1% at 2 A

## ISE Module (optional)

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

## Environmental Requirements

Ambient temperature	10 ° C to 35 ° C 10 ° C to 30 ° C (With ISE module)
Relative humidity	<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 (CLSI)
Water consumption	<9 L/h
High concentration waste tank	2.4 L
Washing solution tank	2.4 L

BioSystems, S.A. reserves the right to change specifications of the instruments at any time due to technical improvements.





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Real 200 t/h, even with bi reagent reactions



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

**Manufactured by: BioSystems S.A.**

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