

BA 400

BioSystems

Technical Specifications

Clinical analysis

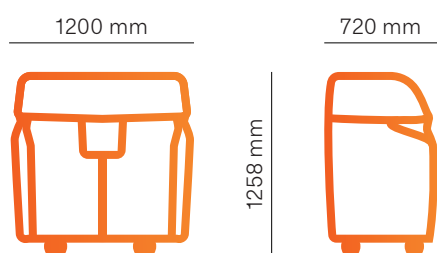
human - centred biotech

BA400 Highlights

- Throughput of 400 t/h (Clinical Chemistry and Turbidimetry).
- Maximum throughput of 480 t/h with ISE Module: Na⁺, K⁺, Cl⁻ (optional).
- Segmented samples rotor composed by 126 sample positions (81 with barcode).
- Automatic haemolysis on whole blood samples.
- 88 cooled reagents on board (6 - 11 °C) for 20 and 60 mL dedicated reagent bottles with barcode.
- Reaction rotor washing station and continuous evaluation of cuvettes 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).
- Minimum user maintenance.

Ordering Information

Item	Code	Quantity
BA400 analyser*/ BA400 analyser with ISE module	83400/83400ISE	-
Extra segments for segmented sample rotor (pediatric adapters included)	AC17457	3 units
Reaction rotors	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
High alkaline washing solution (WS3)**	AC17800	2 x 60 mL
Sample wells (pediatric cups)	AC10770	1000 units
Reagent bottles 60 mL + caps	AC16362	10 units
Reagent bottles 20 mL + caps	AC16363	10 units
Ambar reagent bottles 60 mL + caps	AC16364	10 units
Ambar reagent bottles 20 mL + caps	AC16365	10 units



* FDA approved.

** Check the need of use.

Throughputs

Throughput without ISE module	400 t/h
Throughput of ISE module	240 t/h
Maximum (photometric + ISE)	480 t/h

ISE Module (optional)

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

Sample handling

Sample rotor capacity	126
Barcode reader	Yes
Number of samples with barcode	81
Size of primary tubes	Diameter 12 mm to 16 mm (max. height 100 mm)
Sample well	Diameter 13.5 mm
Dispensing mode	Ceramic pump without maintenance
Pipetting volume	From 2 µL to 40 µL
Pipetting resolution	0.1 µL
Predilution ratio	From 1:2 to 1:200
Clot detector	Yes
Tip wash	Inside and outside

Reagent handling

Volume of reagent bottles	20 mL, 60 mL
Reagent rotor capacity	88 (44 bottles of 20 mL or 60 mL + 44 bottles of 20 mL)
Cooled reagent	Yes
Temperature range of refrigerator	From 6 to 11 °C (measured at 21 °C)
Barcode reader	Yes
Reagent volume R1	120 µL to 450 µL
Reagent volume R2	10 µL to 300 µL
Dispensing mode	Ceramic pump without maintenance
Pipetting resolution	1 µL
Tip wash	Inside and outside

Reactions rotor

Reaction volume range	From 180 µL to 600 µL
Number of wells	120
Well material	UV methacrylate
Type of incubation	Dry without maintenance
Temperature	37.0 °C
Temperature accuracy	± 0.2 °C
Number of mixers	2
Cuvette washing system	7 tips (2 for washing, 3 for rinsing and 2 for drying)

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 (for 340 nm, 405 nm and 505 nm)	CV <1% at 0.1 A CV <0.1% at 2 A

Size and weight

Size (w., d., h.)	1200x720x1258 mm
Weight	210 Kg

Electrical and Environmental Requirements

Mains voltage	115 to 230 V
Mains frequency	50 or 60 Hz
Electric power	500 VA
Ambient 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 water type II
Water consumption	<14 L/h
Bottle of high concentration waste	5 L
Bottle of washing solution	5 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
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Directives and Standards Compliance

EC Directive-IVD	98/79/CE
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Management
System
ISO 9001:2015
ISO 13485:2016

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