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Data Sheet

August 15, 2026

BIOSYSTEMS

Biosystems BA400 Chemistry Analyzer

BioSystems BA400 Clinical Chemistry Analyser Queue model BA400 is the BioSystems BA400 fully automatic random-access clinical chemistry and turbidimetry analyser. OEM BA400 brochure rates 400 tests/h photometric (clinical chemistry and turbidimetry), 320 tests/h ISE, 560 tests/h photometric plus ISE (Na⁺, K⁺, Cl⁻, Li⁺), LED source, wavelengths 340/405/505/535/560/600/635/670 nm, photometric range minus 0.2 to 3.5 A, internal resolution 0.0001 A, CV less than 1 percent at 0.1 A and less than 0.1 percent at 2 A (340/405/505 nm), 88 cooled reagents 6 to 11 C at 21 C (20 mL and 60 mL bottles), R1 120 to 450 uL, R2 10 to 300 uL, sample pipette 2 to 40 uL at 0.1 uL, predilution 1:2 to 1:200, reaction 180 to 600 uL, 120 UV-methacrylate wells at 37.0 C plus or minus 0.2 C, 2 mixers, 7-tip wash (2 wash, 3 rinse, 2 dry), 115 to 230 V 50/60 Hz 500 VA, 10 to 35 C (10 to 30 C with ISE), humidity less than 85 percent non-condensing, altitude less than 2500 m, water type II less than 14 L/h, 1200 × 720 × 1258 mm, 210 kg, LIS HL7 and ASTM, IVD 98/79/CE. Queue model BA400 is the BioSystems BA400 fully automatic random-access clinical chemistry and turbidimetry analyser. OEM BA400 brochure rates 400 tests/h photometric (clinical chemistry and turbidimetry), 320 tests/h ISE, 560 tests/h photometric plus ISE (Na⁺, K⁺, Cl⁻, Li⁺), LED source, wavelengths 340/405/505/535/560/600/635/670 nm, photomet



MODEL

Biosystems BA400

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

BA400

LISTING

<https://aumictechlabs.com/products/ba400-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Biosystems BA400 is an automated clinical chemistry and turbidimetry analyzer designed for in vitro diagnostic use, offering high efficiency and optimal operational costs for laboratories. It has a solution when paired with BioSystems original reagents and worldwide technical support.

Technical Specifications

- * Throughput: * 400 tests/hour (Clinical Chemistry and Turbidimetry) * Up to 560 tests/hour with optional ISE module (Na⁺, K⁺, Cl⁻, Li⁺) * 320 tests/hour with optional ISE module (Na⁺, K⁺, Cl⁻, Li⁺)
- Optical System:** * LED monochromatic sources with 8 working wavelengths (340-670 nm) * LED light source with hard coating filter * Patented LED technology with virtually no maintenance * Photometric range: -0.2 A to 3.5 A * Internal resolution: 0.0001 Abs * Dynamic baseline with SMART LED technology * Solid-state light source with a split reference beam and a working life up to 50,000 hours * Dual photodiode system for stable readings and to stabilize light source drift
- Sample Handling:** * Capacity: Up to 135 positions for samples, controls, and standards * Primary or pediatric tubes compatible * Up to 90 sample positions with barcode reader * Segmented sample rotor for faster sample loading * Easy STAT sample positioning, with non-fixed positions for samples, controls, and calibrators * Sample volume: 2 - 40 µL * Pipetting resolution: 0.1 µL * Level detection * Clot detection * Vertical collision detection * Automatic pre-dilution options for certain species * Automatic haemolysis on whole blood samples
- Reagent Handling:** * 88 refrigerated reagent positions (5-8°C or 6-11°C) * Dedicated reagent bottles for 20 mL and 60 mL * Reagent barcode reader * Reagent volume detection system * Reagent 1 volume: 90 - 500 µL * Reagent 2 volume: 0 - 300 µL * Minimum reaction volume: Not specified * Maximum reaction volume: Not specified
- Reaction Rotor:** * Washing station and continuous evaluation of cuvette status * Minimum reaction volume: Not specified * Maximum reaction volume: Not specified * Well material: Not specified * Temperature reaction: Not specified
- Water and Waste:** * High capacity washing solution and waste containers, operational for up to 8 hours * Automated water inlet and waste outlet with internal reservoirs * Low water consumption: less than 14 L/hour * Thermostated fluid washing station system
- ISE Module (Optional):** * Measures Na⁺, K⁺, Cl⁻, Li⁺ * Throughput: 320 tests/hour
- Software and Connectivity:** * User-friendly software with intuitive graphical interface * Real-time monitoring of work-session * Exhaustive quality control analysis (Westgard rules, Youden and Levey-Jennings charts, historical results database) * Full-capacity to integrate into LIS (ASTM, HL7) * Distributed electronics through CAN (Controller Area Network) bus system
- Dimensions and Weight:** * Dimensions: 1258 mm x 720 mm x 1200 mm * Weight: 210 kg
- Operating Conditions:** * Ambient temperature: 18 to 32 °C (64.4 °F to 89.6 °F) * Ambient humidity: 20% to 80% * Noise Output: 60 dbA (stand-by mode)
- Electrical:** * Not specified.
- Interfaces:** * Barcode readers for sample and reagents LIS integration (ASTM, HL7) CAN bus system for distributed electronics
- Physical:** * Compact design Dimensions: 1258 mm x 720 mm x 1200 mm Weight: 210 kg
- Compatibility:** * Compatible with original BioSystems reagents Can be used with primary or pediatric tubes
- Veterinary configurations and species-specific programming are supported

Why Choose Aumictech for Biosystems BA400? At Aumictech, we specialize in supplying high-end clinical chemistry analyzers. Whether you need enhanced laboratory efficiency, minimized system maintenance, or reliable performance for clinical chemistry testing, our team ensures the Biosystems BA400 delivers maximum performance for your application.

BA400 Characteristics / Specifications

PARAMETER	VALUE
Model	BA400
Instrument Type	random access clinical chemistry analyser
Photometric Throughput	400 tests/h clinical chemistry and turbidimetry
Ise Throughput	320 tests/h ISE module
Combined Throughput	560 tests/h photometric plus ISE
Ise Ions	Na+, K+, Cl-, Li+
Light Source	LED
Wavelengths	340, 405, 505, 535, 560, 600, 635, 670 nm
Photometric Range	minus 0.2 A to 3.5 A
Optical Resolution	0.0001 A internal
Precision Low	CV less than 1 percent at 0.1 A (340, 405, 505 nm)
Precision High	CV less than 0.1 percent at 2 A (340, 405, 505 nm)
Reagent Positions	88 (44 of 20 or 60 mL plus 44 of 20 mL)
Reagent Cool	6 C to 11 C measured at 21 C
Reagent R	120 uL to 450 uL
Sample Volume	2 uL to 40 uL, 0.1 uL resolution
Predilution	1:2 to 1:200
Reaction Volume	180 uL to 600 uL
Cuvettes	120 UV methacrylate wells
Incubation	37.0 C dry, accuracy plus or minus 0.2 C
Wash Station	7 tips (2 wash, 3 rinse, 2 dry)
Mains	115 to 230 V, 50 Hz or 60 Hz, 500 VA
Ambient	10 C to 35 C; 10 C to 30 C with ISE
Humidity	less than 85 percent without condensation
Altitude	less than 2500 m

PARAMETER	VALUE
Water	purified type II, less than 14 L/h
Dimensions	1200 mmWx 720 mmDx 1258 mmHMass: 210 kg
Lis	HL7 and ASTM
Ivd	EC Directive IVD 98/79/CE
Manufacturer	BioSystems S.A.
Literature	BioSystems BA400 brochure 2022 technical specifications
Family	BA clinical chemistry analysers
Form Factor	floor-standing analyser
System Role	automated clinical chemistry and turbidimetry
Primary Tubes	12 mm to 16 mm diameter, max height 100 mm
Sample Well	13.5 mm diameter
Host Pc	Windows 10 64-bit, Intel Core i3 3.10 GHz class, 4 GB RAM, 40 GB disk, 1024×768

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

From BioSystems BA400 brochure 2022 (400/320/560 t/h, LED wavelengths, 88 reagents, 1200 x 720 x 1258 mm, 210 kg, 500 VA). ISE isafactory/module configuration, notadatasheet Option-row.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.