

# SFRI

Medical Diagnostics



BSA3000

Semi-automatic biochemistry Analyzer  
Performance and Convenience without Compromise

# BSA 3000 - A Robust Programmable Spectrophotometer



The BSA 3000 is a semi-automated biochemistry instrument used to perform routine clinical chemistry tests. The BSA 3000 performs certain operations automatically such as heating, analyzing, calculating and printing; the reaction solutions being prepared manually by the operator beforehand.

The BSA 3000 is the perfect primary instrument for mid-size to small laboratories and hospitals with small sample volumes. The BSA 3000 can also be useful as a secondary unit for bigger laboratories and hospitals that voluntarily prefer not to automate certain tests: (1) to avoid contamination from certain polluting and unstable reagents; (2) to obtain quick and precise results in emergency cases.

- ③ Multiple measuring methods : End point, Kinetic, Fixed-time and Absorbance analysis
- ③ Highly accurate and reliable results due to anti-vibration and anti-disturbance optical system
- ③ Measurement precision of 0.0001ABS
- ③ Wavelengths range 340 nm to 630 nm
- ③ Testing mode: flowcell
- ③ Bichromatic testing available
- ③ Calibration: linear and non-linear
- ③ Comprehensive quality control program
- ③ User-friendly interface
- ③ Reaction curves displayed
- ③ Open reagent system

## Guaranteed Precise Results

The BSA 3000 large photometric range, high resolution and very low drift, ensure very precise and highly reliable results. Carryover and cross-contamination are avoided thanks to aspiration volume (recommended 400µl for 32µl measuring volume) and rinse cycle. Comprehensive quality control program including Levey-Jenning charts ensure top quality results.

## Easy Work Flow

The instrument stores up to 90 different test programs to be recalled by operator at any time. 26 tests are preprogrammed with SFRI reagents for immediate testing. Operator can program up to 64 customized tests and can create work list for efficient work flow. Linear and non-linear calibration curves are memorized to avoid unnecessary recalibration due to high costs of certain reagents (for turbidimetry).



# Powerful Features in a Compact Unit for Biochemical Investigations, Enzymes and Immunturbidimetrics

## Simple Operations

Simple and clear-cut parameters setup allows operators to program tests quickly. Real-time monitoring of reaction curves and data, as well as temperature change, ensure operators can follow all reactions as they occur and control discrepancies. 3000 results per day are available in memory at any time and can be printed or transferred via LIS.

## User-friendly

The large LCD touch screen and straightforward interface make for comfortable and easy use. BSA 3000 can be ordered with either English or French software and comes with a built-in thermal printer for standalone operations. A visual and audible alarm sounds to alert operator to any errors.



## Cost efficient

High stability reagents; lamp saving features that largely prolong lamp life; and simple, easy-to-follow maintenance operations that ensure long life of instrument make the BSA 3000 a very cost efficient analyzer.

## Reliable and Repeatable

The optics and the automatic filter selection assure reliable and repeatable measurements. Calculation is performed automatically so that results are displayed directly in the required measuring unit.

## Robust and Sturdy

With several thousand units sold worldwide, never have there been any significant malfunctions or complaints received from clients. The BSA 3000 is one of the most robust instruments on the market today.

## Parameter Settings

Method	Reaction type
Absorbance limit	Absorbance limit
Temperature	Aspiration volume
Reagent blank y/n	Standards
Sample blank y/n	Linearity check
Delay time	Measuring time
Unit for results	

## Flexible and Practical

BSA 3000 is an open system and is compatible with all reagents and tests. It supports bichromatic tests for Kinetic, End point and Fixed-time measurements. Its temperature control option allows for quick interchange between 3 temperatures (25°, 30°, and 37°C) for optimum analysis. Measurement times can also be adjusted for faster results.

# BSA 3000

## TECHNICAL SPECIFICATIONS

### BSA 3000: REFERENCE A0101

#### MEASURING METHOD

End point, Kinetic, two point Kinetic, Fixed time,  
Absorbance, Turbidimetry  
Regent blank, Sample blank  
Monochromatic and bichromatic method.

#### LIGHT SOURCE

Quartz halogen lamp 12 V/ 20 W  
Stray light: < 10% at 340 nm

#### OPTICS

Filter wheel can hold up to 8 filters  
7 standard filters: 340 nm, 405 nm, 492 nm, 510 nm,  
546 nm, 578 nm, and 630 nm  
1 free position for extra filter  
Bandwidth <8 nm

#### PHOTOMETRIC RANGE

Measuring range: 0.0000 to 3.0000 ABS  
Resolution: 0.0001 ABS  
Drift: 0.002 ABS

#### FLOWCELL

Stainless steel with quartz window  
Optical path: 10 mm  
Measuring volume: 32 µl  
Programmable aspiration volume: 200 - 2000 µl

#### CALIBRATION

Linear  
Non linear up to 6 points  
Factor

#### MEMORY STORAGE

3000 results per day available in memory at any time and transferable via LIS.

#### THERMOSTATIC CONTROL

By means of Peltier elements  
25°, 30°, 37°C optional  
Precision: ± 0.1°C

#### INPUT/OUTPUT

RS232 port for mono-directional LIS

#### PRINTOUT

Built-in thermal printer, 57.5 mm wide paper,  
recording width 48 mm

#### DISPLAY

6" LCD touch screen  
Mono-color display

#### OPERATING ENVIRONMENT

Temperature 15°C – 30°C  
Humidity 20% - 80% (max humidity)

#### POWER REQUIREMENTS

A.C. 110/220 V ±10%; 50 – 60 Hz

#### DIMENSIONS

445(W) x 190(H) x 420(D) mm

#### WEIGHT

9 kg

Your Local Distributor:

