

BS-120 Auto Chemistry Analyzer



Features

- Discrete, random access, fully automated
- 100 tests per hour, up to 300 tests per hour with ISE
- Up to 26 onboard chemistries and 4 ions
- Refrigerated reagent compartment
- Automatic probe cleaning, liquid level detection & collision protection
- 8 wavelengths: 340-670nm
- Automatic dilution for abnormal sample
- External bar code reader (optional)
- Bi-directional LIS interface

Technical Specifications

System Function:

- Automatic, discrete, random access
- STAT sample priority
- Throughput: up to 100 tests/hour (without ISE), up to 300 tests/hour with ISE (4 ions)
- Measuring principles: absorbance photometry, turbidimetry, Ion Selective Electrode technology
- Methodology:

End-point, Fixed-time, Kinetic, optional ISE

- Single/dual reagent chemistries, monochromatic / bichromatic
- Linear / non-linear multipoint calibration
- Programming: open system with user defined profiles and calculations

Reagent/Sample Handling:

- Reagent/Sample tray: 28 positions for reagents and 8 positions for samples in refrigerated compartment (4~15°C)
- Reagent volume: R1: 180~450µl, step by 1µl

R2: 30~250µl, step by 1µl

- Sample volume: 3~45µl, step by 0.5µl
- Reagent/Sample probe:
 - liquid level detection, collision protection and inventory checking
- Probe cleaning:
 - automatic washing both inside and outside
 - carry over < 0.1%
- Automatic sample dilution:

pre-dilution and post-dilution

- dilution ratio up to 150
- Dilution vessel: disposable cuvette

External Bar Code Reader (optional):

- Used for sample and reagent programming
- Applicable to various bar code systems including Codabar、ITF (Interleaved Two of Five)、code128、code39、UPC/EAN、Code93
- Capable to communicate with LIS in a bidirectional mode

ISE Module (optional):

- Measuring parameter: K⁺, Na⁺, Cl⁻, Li⁺
- Throughput: up to 200 tests per hour

Reaction System:

- Reaction rotor: rotating tray, containing 40 cuvettes
- Cuvette: optical length 5mm
- Reaction volume: 180~500µl
- Operating temperature: 37°C
- Temperature fluctuation: ± 0.1 °C
- Independent mixing probe

Optical System:

- Light Source: Halogen-tungsten lamp
- Wavelength: 340nm, 405nm, 450nm, 510nm, 546nm, 578nm, 630nm, 670nm
- Absorption range: 0 ~3.5Abs (10mm conversion)

Control and Calibration:

• Calibration mode: linear (one point, two points and multi-points), Logit-Log 4P, Logit-Log 5P, spline, exponential, polynomial, parabola

• Control rules: west-guard multi-rule, cumulative sum check, twin plot

Operation Unit:

- Operation system: Windows 2000 Pro with SP4 or Windows XP Pro / Home
- Interface: RS-232

Working Conditions:

- Power Supply: AC200~240V, 50/60Hz, 800W
 - AC100~130V, 50/60Hz, 800W
- Temperature: 15-30°C
- Humidity: 35-85%
- Water consumption: 2.5L/hour De-ionized water
- Dimension: bench top, 690mm(W)×570 mm(D)×595 mm (H)
- Weight: 75 kg