



## AUTO CHEMISTRY ANALYSER BS-120

With strong R&D capability, Mindray once again share with our customers the pleasure of launching a new model of fully automatic, discrete, random access chemistry analyzer BS-120, which is equipped with up-to-date technologies and superior performance. The new features and the main benefits of BS-120 include:

- ⌚ 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

### 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
- ⌚ 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)
- ⌚ 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:  $\pm 0.1^\circ C$
- ⌚ 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)



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## 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



Reagent/sample disk



Disposable Cuvettes



ISE Module



External Barcode Reader