

**BeneSphera™ Brand**  
**CLINICAL  
CHEMISTRY  
ANALYZER**  
C71

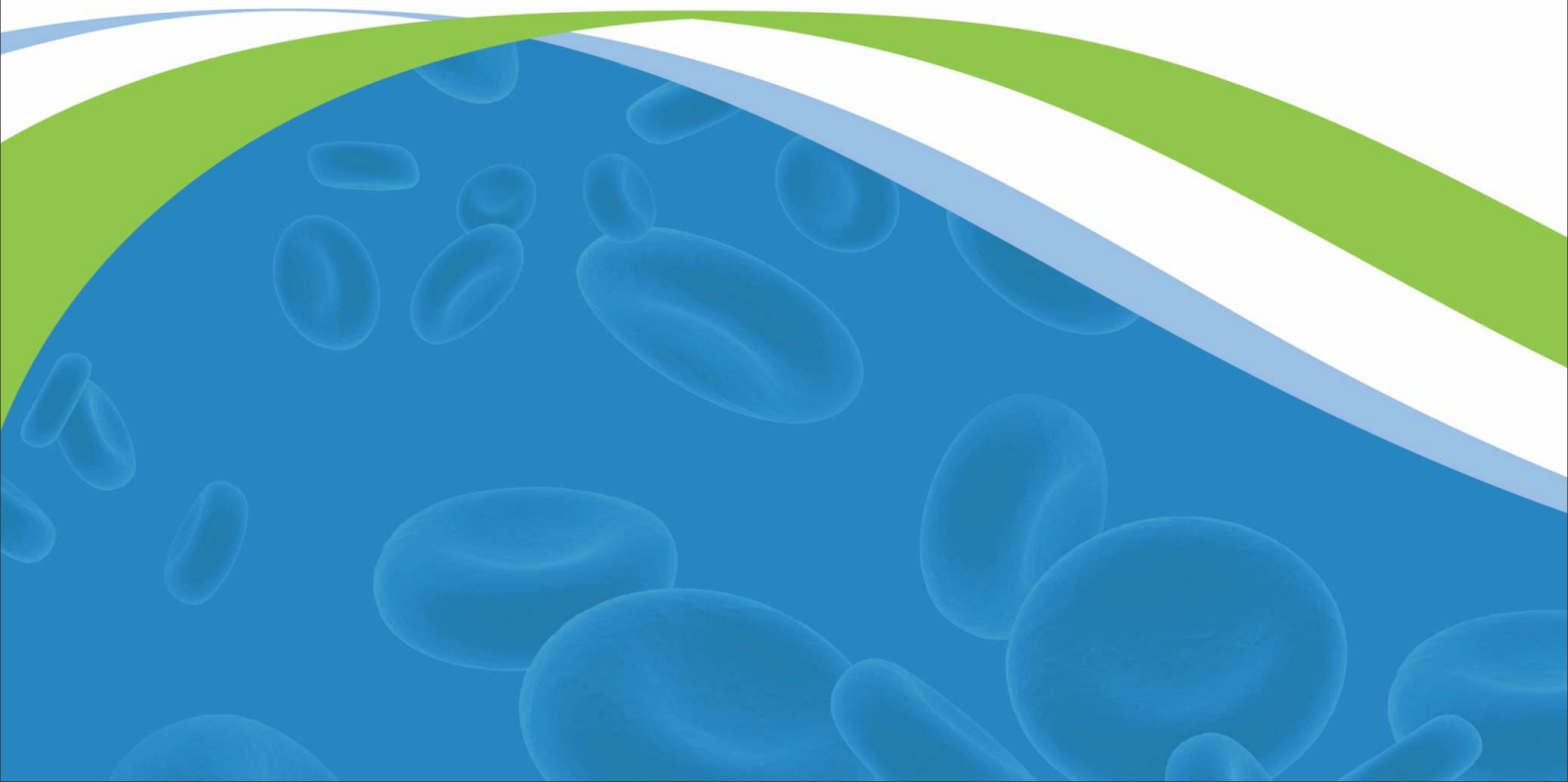


# BeneSphaera™ Brand CLINICAL CHEMISTRY ANALYZER

C71

## Features and benefits

- Discrete, random access
- Fully automated analyzer
- Capable of running up to 100 tests per hour and up to 300 tests per hour with ISE (Na<sup>+</sup>/K<sup>+</sup>/Li<sup>+</sup>/Cl<sup>-</sup>)
- Up to 28 onboard chemistries
- 36 sample and reagent positions - flexible for user convenience
- Refrigerated reagent compartment
- Automatic probe cleaning, liquid level detection, and collision protection
- Eight wavelengths: 340-670nm
- Automatic dilution for abnormal samples
- Bi-directional LIS interface







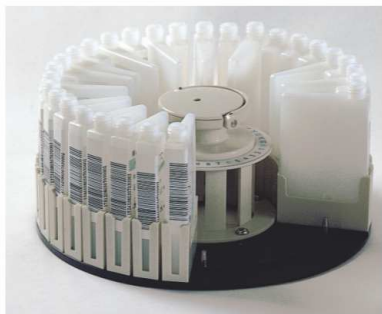
### Multi-functional Sample/Reagent Probe

- Collision protection
- Liquid level detection
- Internal and external probe washing
- Probe depth adjustment automatically
- Pre-heating of reagents



### Excellent Reaction Tray

- Highly stable reaction temperature control at  $37\pm 0.1^{\circ}\text{C}$
- Spot photometry with high speed digital transmission system
- Contains 40 reusable reaction cuvettes
- Automatic eight position filter wheel
- Maintenance-free heater elements



### Flexible Sample/Reagent Tray

- Optional external reagent/sample barcode reader
- 36 sample and reagent positions - flexible for user convenience
- Up to 20/10 virtual sample/reagent trays can be programmed
- Primary tubes and various sample cups can be used, non-fixed positions for sample, control, calibrator or STAT
- 24-hour non-stop cooling with peltier elements



### High Quality ISE Module (optional)

- Measurements of  $\text{K}^+$ ,  $\text{Na}^+$ ,  $\text{Cl}^-$ ,  $\text{Li}^+$
- Throughput: up to 200 tests per hour
- Six month shelf-life



### High Performance Mixer Design

- Minimizes cross contamination
- Optimal homogenization in minimum time
- Thoroughly mixes after dispensing of sample or second reagent



## Technical Specifications

System Functions	
Automatic, discrete, random access, STAT sample priority	
Throughput	: 100 test/hour (without ISE), up to 300 test/hour with ISE (4 ions)
Measuring Principles	: Absorbance photometry, turbidimetry, Ion Selective Electrode technology
Methodology	: End-point, fixed-time, kinetic, optional ISE
Programming	: Single/dual reagent chemistries, monochromatic/bichromatic, Linear/non-linear multipoint calibration, Open system with user defined profiles and calculations
Reagent/Sample Handling:	
Reagent/Sample tray	: Total 36 Sample & Reagent position, Flexible as per user convenience
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 ration 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 Code bar, ITF (Interleaved Two of Five), Code 128, Code 39, UPC/EAN, Code 93; capable to communicate with LIS in a bi-directional mode

ISE Module (optional)	
Measuring parameter	: K <sup>+</sup> , Na <sup>+</sup> , Cl <sup>-</sup> , Li <sup>+</sup>
Throughput	: Up to 200 tests per hour
Reaction System	
Reaction rotor	: Rotating tray, containing 40 cuvettes, reusable
Cuvette	: Optional length 5mm
Reaction volume	: 180~500µl
Reaction temperature	: 37± 0.1°C
Mixing system	: Independent mixing probe
Optical System	
Light Source	: Halogen-tungsten lamp
Wavelength	: 340nm, 405nm, 450nm, 510nm, 545nm, 578nm, 630nm 670nm
Linear range	: 0~3.5 Abs
Control and Calibration	
Calibration mode	: Linear (one point, two-point and multi-point), Logit-Log 4P, logit-Log 5P, spline, exponential, polynomial, parabola
Control rules	: X-R, L-J, 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 or AC 100~130V, 50/60Hz, 800W
Temperature	: 15-30°C
Humidity	: 35~85%
Dimension	: Bench top: 690mm(W)x570mm(D)x595mm(H)
Weight	: 75kg
Water consumption	: 2.5L/hour



Phillipsburg, NJ 9001:2008 & 14001:2004  
Paris, KY 9001:2008  
Mexico City, Mexico 9001:2008  
Deventer, the Netherlands 9001:2008, 14001:2004 & 13485:2003

Gliwice, Poland 9001:2008 & 17025:2005  
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