

# CA 300

Auto Chemistry Analyzer

## General feature

Fully automated, random access, open system  
 Up to 240 T/H (Without ISE)  
 Wash and non-wash system both available  
 81 special plastic cuvettes, quartz optional  
 24 hours reagent cooling system  
 40 reagent positions and 40 sample positions  
 Full-sealed matrix spectrometric system  
 Barcode reader and internal PC optional



High polished nano material sample probe  
 Liquid level detection, collision protection  
 Auto-depth adjustment  
 High accuracy ceramic syringe  
 Built-in degasser ensured precise sampling  
 Washed by alkaline wash solution  
 Maintenance free rotor with stable movement



Locker design for reagent/sample disk rotation  
 40 positions for reagent, compatible with Olympus and Hitachi bottles  
 24 hours refrigerator, 4-12°C  
 Noise free water cooling design  
 40 positions for sample, compatible with regular sample tube/cup, vacuum tube, plastic tube, etc  
 Optional barcode reader



Auto adjustment for gain  
 Rear spectrophotometry by filter  
 Halogen-tungsten lamp with 2000 hours' lifespan  
 8 wavelengths from 340-670nm, precision ±2nm  
 Simultaneously dual wavelength detection  
 Silent water cooling design avoid heat interference



High-polished nano material  
 6-step auto washing station  
 Wash cuvettes with wash solution  
 Auto wash probe and mixer  
 Intelligent anti-contamination program



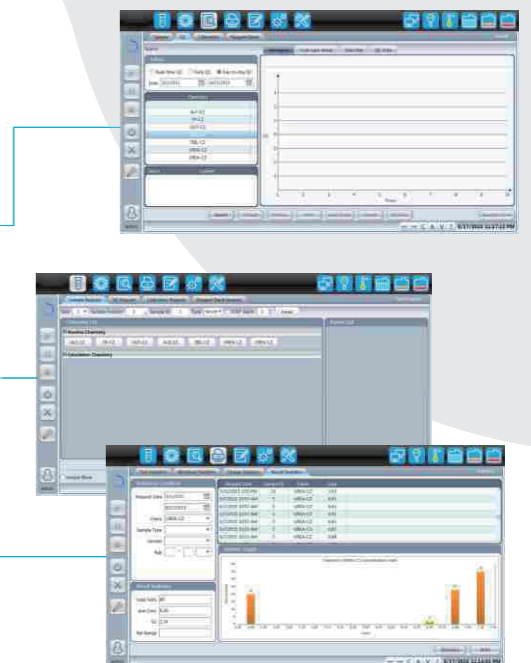
Simplified liquid system  
 Branded components ensure high quality  
 Separated outflow for concentrated waste  
 Easy maintenance  
 Low water consumption: <5L/H



81 cuvettes  
 Semi-permanent plastic cuvette  
 Optional quartz cuvette  
 Constant solid heating  
 Reaction temperature:  $37 \pm 0.1^\circ\text{C}$   
 Reaction volume 150-500ul



User-friendly software  
 Compatible with Win7/Win8



## Specifications

### System Function:

General:	Automatic, Discrete, Random Access STAT sample priority
Throughput:	Up to 240 tests/hour (without ISE) Colorimetric, Turbidimetry
Principles:	End-point, Fixed-time, Kinetic
Methodology:	Linear/non-linear multi-point calibration
Programming:	Open system, closed system on demand

### Reagent/Sample Handling:

Reagent/Sample tray:	40 reagent positions, 40 sample positions in cooling compartment (4~12°C)
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### Reagent volume:

R1: 150~450ul, step by 1 ul

R2: 10~300ul, step by 1 ul

Sample volume: 2~50ul, step by 0.1 ul

Reagent/Sample probe: Liquid level detection and tracking,  
vertical & horizontal collision protection  
and inventory checking

Probe cleaning: Automatic washing of interior and exterior  
Carry-over < 0.1%

Automatic dilution: Pre-dilution and post-dilution  
Dilution ratio up to 1: 200

### Optical System:

Light Source: Halogen-tungsten lamp

Photometer: Free maintenance sealed photometer,  
rear spectrophotometry by filter

Wavelength: 8 wavelengths: 340nm, 405nm, 450nm,  
510nm, 546nm, 578nm, 630nm, 670nm

Absorption range: 0~3.5Abs (10mm conversion)

### Reaction System:

Cuvette: Rotating tray, containing 81 cuvettes  
Semi-permanent plastic cuvette

Reaction volume: 150~500ul

Reaction temperature: 37°C±0.1°C

Mixing System: Standalone mixing bar

Cuvette Washing: 6-step wash station

### Control and Calibration:

Calibration mode:	Linear, Logit-Log 4P, Logit-Log 5P, Spline, Exponential, Polynomial
Control software:	Westgard multi-rule, Cumulative sum check, Twin plot, L-J Chart
Operation system:	Windows 7/ Windows 8
Interface:	RS-232
Power Supply:	AC 100~240V, 50/60Hz, 350VA
Temperature:	10-30°C
Humidity:	30-85% RH
Dimension:	855mm (W) x550mm (D) x580mm (H)
Weight:	75 Kg



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