

# Seimitsu Chemistry Analyzer SCA 300



Discrete, random access, fully automated  
Up to constant 300 tests per hour  
Optional for external bar code reader  
120 positions for samples and 80 positions for reagents  
Automatic probe cleaning, liquid level detection, collision protection  
Reversed optic system with 8 wavelengths  
Refrigerated reagent and sample compartment

## Product features

### Operating System

- English operating system: windows2000, windows XP, windows7, windows8, windows10.
- Make print format and content freely, provide several common formats.
- Special user management password, rational distribution of user operation permissions.
- RS-232 standard interface, support for intranet, remote print report.
- Optional various databases, autosave, automatic backup, save all kinds of data permanently.
- Real-time monitoring of sample tray、reagents tray、reacting tray; Real-time display of reaction temperature, reagent allowance, reaction curve, calibration curve and quality control chart.
- Check and judge reaction endpoint, reaction linear interval, substrate exhaustion, reagent blank absorbance, etc.



### Sampling and mixing system

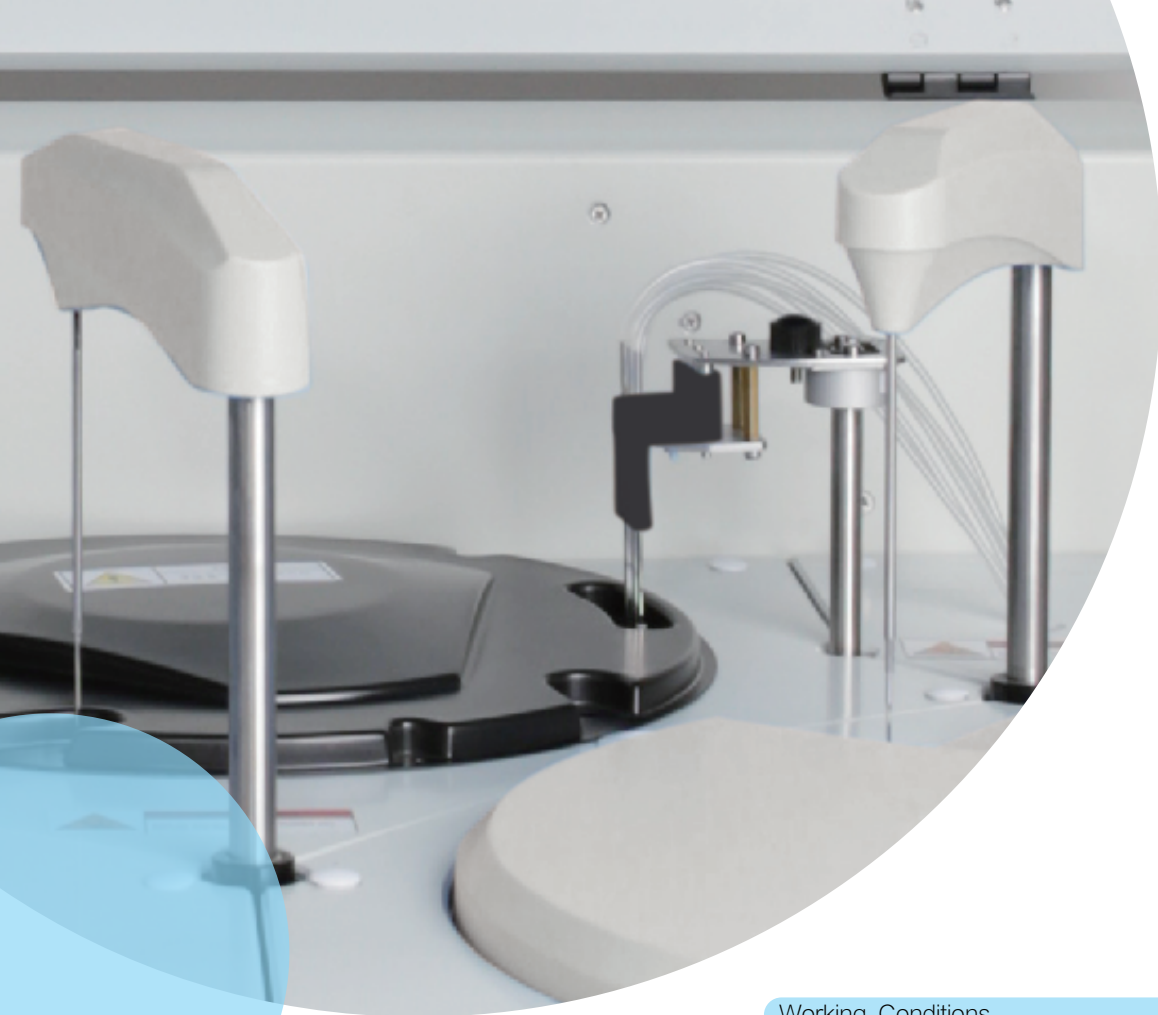
- **Sample capacity:** 2-30  $\mu\text{l}$ , 0.1 $\mu\text{l}$  increasing
- **Sample probe:** The inner and outer walls are highly polished, with the function of liquid level detection, tracking and collision protection, sample probe matching special cleaning liquid, prevent cross contamination
- **Reagent capacity:** 2-300  $\mu\text{l}$ , 0.1  $\mu\text{l}$  increasing
- **Reagent probe:** The inner and outer walls are highly polished, with the function of liquid level detection, tracking and collision protection
- **Reagent bottle:** Reagent bottles with volume of 15ml, 20ml, 30ml, 50ml, 60ml and 70ml can be used, and the dead volume is less than 1ml
- **Mixing bar:** Double mixing bar, S and R2 independent mixing bar to reduce cross contamination. The mixing bar is made of special material, surface treatment using Teflon, not hanging liquid, thoroughly clean before and after mixing to prevent cross contamination

### Reagent Handling

- **Reagent tray:** 80 positions in refrigerated compartment(4~16 $^{\circ}\text{C}$ )
- **Reagent volume:** R1:150~300  $\mu\text{l}$ , R2:20~150  $\mu\text{l}$
- **Reagent probe:** Liquid level detection, collision protection and inventory check
- **Probe cleaning:** Interior and exterior automatic probe washing

### Sample Handling

- **Sample tray:** 120 positions for sample primary or secondary tubes and sample cups
- **Sample volume:** 2~100 $\mu\text{l}$ , step by 0.1  $\mu\text{l}$
- **Sample probe:** Liquid level detection, clot detection and collision protection
- **Probe cleaning:** interior and exterior automatic probe washing carry-over<0.05%



#### Working Conditions

- **Temperature:** 15°C~30°C
- **Humidity:** ≤85%
- **Water consumption:** 18L/hour, De-ionized water
- **Power supply:** 200~240V 50/60HZ 1000W or 100~120V 60HZ 1000W
- **Dimension:** 978mm(w)×784mm(D)×773(H)
- **Net weight:** 89KG
- **Rough weight:** 129KG

#### Analysis system

- **Working mode:** Discrete/random access
- **Test speed:** test speed 300T/H (without ISE)
- **Test principle:** Absorbance photometry, Turbidimetry
- **Methodology:** End-point, Fixed-time, Kinetic, Single/Dual reagent chemistries, monochromatic/bichromatic  
Linear/non-linear multi-point calibration
- **The longest reaction time:** 15 minutes
- **Minimum reaction volume:** 150 µl
- **Cuvettes material:** plastics (quartz glass can be selected), 81 cuvettes have the function of automatically deducting reagent and sample blanks
- **Linear range of absorbance:** 0-3.8Abs  
Halogen light source using time ≥ 2000 hours  
Wavelength: 340nm, 405nm, 450nm, 510nm, 546nm, 578nm, 630nm, 670nm
- **Refrigeration system:** water medium uniform refrigeration technology
- **Reagent storehouse temperature:** 4-16°C
- **Reaction temperature:** 37±0.2°C
- **Temperature fluctuation:** ±0.1°C

#### Reaction cuvettes cleaning system

3 groups of cleaning probes, low carry-over  
Optional acid and alkali cleaning solution

#### Calibration and quality control

- **Quality control type:** real time quality control, daily quality control, day to day quality control  
Quality control charts L-J, Cumulative, Twin Plot  
The quality control rules are arbitrarily formulated by default to Westgard multiple rules
- **The calibration type:** linear and nonlinear. Logit-4P, Logit-5P, Spline, exponent, polynomial, factor method  
Automatically check the calibration curve and select the best calibration type of the fitting degree automatically