

Instrument Specification	
Instrument Type	Fully automatic random access chemistry analyzer
Throughput	Constant speed 430 T/H, 620 T/H with ISE
Testing Method	One–point end, two–point end, rate (kinetic), two points rate, mono/double wavelength, eliminate reagent and sample blank immunoturbidimetry
STAT Function	Emergency samples can be added during routine test

Sample System	
Sample Disk	79 sample positions (including routine sample, calibration, QC and STAT positions), support primary tubes and sample cup
Collision Detection	Probes and washing arm collision protection
Sample Probe	Inner & outer high polished probes with low carry over Liquid level detection Volume tracking function during aspiration
Sample Volume	1.2~35 μL, variable in 0.1 μL

Reagent System	
Reagent Disk	80 positions compatible with several types of bottles
Cooling System	Independent 2~8℃ 24 hours non–stop cooling system
Washing System	Warm water washing for cuvettes and both inner and outer of the probes
Reagent Probe	Inner & outer high polished probe with low carry over Reagent volume tracking function during aspiration
Reagent Volume	10~360 μL, variable in 0.5 μL

Optical System	
Light Source	Long life halogen lamp 12V/20W
Optical System	Fully sealed grating system with 16 wavelengths 340nm, 380nm, 405nm, 450nm, 480nm, 505nm, 546nm, 570nm, 605nm, 630nm, 660nm, 700nm, 750nm, 770nm, 800nm, 850nm

Reaction System	
Reaction Cuvette	120 high permeable UV cuvettes Hard glass cuvette optional
Washing System	8–probe 10–step with detergent Extra cleaning optional for specific test items
Mixing System	2 individual stirrers
Reaction Volume	Minimum 90 μL
Incubation System	Solid direct heating 37 ± 0.1℃

Calibration and QC	
Calibration	Linearity calibration (single point, two points, multi points) Non–linearity calibration (Logit–Log4P, Logit–Log5P, exponential function, spline, exponential 5P, parabola, Wei Bull)
QC Rules	Westgard multi–rules, Levey–Jennings rules and diverse levels of QC

Operation System	
Operation System	Windows 7, 10
Testing Sequence	Programmable test sequence Maximize test speed and minimize carryover
Advanced Features	Reaction reading points traceable after test cycle finish Exceed linearity and high concentration sample auto–dilution Real–time monitoring reaction process
LIS Protocol	Bi–directional LIS/HIS
Report	Various editable customized formats
Data Storage	Depend on PC host memory capacity

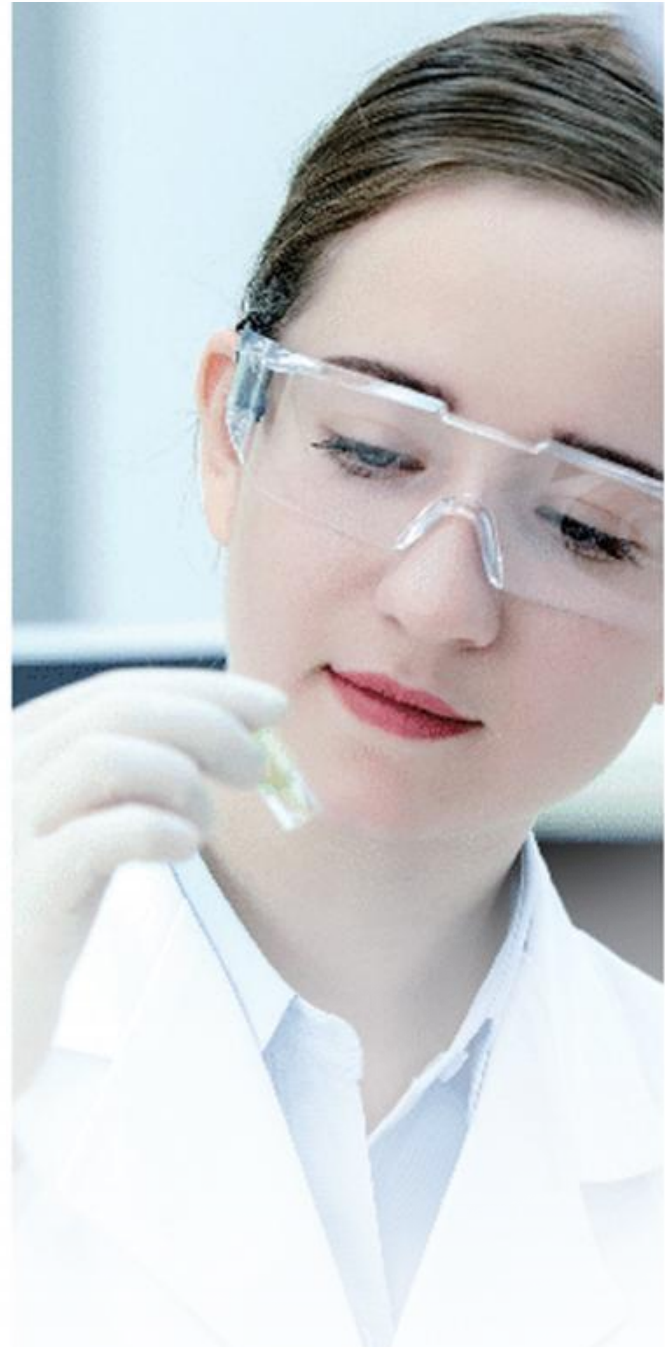
Others	
Dimension	950mm(L) × 643mm(W) × 1114mm(H)
Weight	171.5 kg
Water Consumption	≤15 L/H during operation



SF-431 CA

Automatic Chemistry Analyzer

Constant 430 T/H, 620 T/H with ISE
 User Friendly Interface, Tailor–Made
 High System Reliability
 Minimal Intervention Demands



- Constant 430 T/H, 620 T/H with ISE
- 79 sample positions, 80 reagent positions and 120 reaction cuvettes
- Solid direct heating incubation system
- 24 hours non-stop, 2~8°C constant ice-free cooling system
- Fully sealed grating optical system
- Probes & washing arm collision protection
- User-friendly software, easy operation
- Bi-directional LIS/HIS



Minimize Operator Time

- Real-time monitor temperature, distilled water and waste
- One-key pause sample & reagent disk during testing to add new samples and reagents
- Integrated inner bar code reader for sample & reagent



Increase Productivity

- 620 T/H with ISE module
- 120 reaction cuvettes and 20 dummy sample trays
- 84 on-board parameters



Guarantee High Quality Results

- $37 \pm 0.1^{\circ}\text{C}$ reaction incubation by solid direct heating system
- 2~8°C, 24 hours non-stop sample and reagent cooling system
- 0.1 μL variable sampling accuracy
- 16 wavelengths and free maintenance grating optical system



Real-time Workflow Follow Up

- Control all operations from main interface (routine, STAT, temperature, etc.)
- Multiple alarms, auto-retest and auto-dilution functions for over linearity or substrate exhausted samples
- Reaction curve saved for every test
- Calculated results available



Minimal Intervention Demands

- Auto clean cuvettes clean before & after testing
- Auto lamp sleep function to prolong life span
- Software data auto-backup function
- Auto exhausting pipeline air bubbles

