



NeoChem 100

Automatic BENCH TOP biochemistry analyzer
(200 tests/hour)

- Throughput: Random access, 200 tests/h
- 7-step washing system with hot water
- On-board reagent cooling system
Fiber optic - optical system

NeoChem 100 is the new standard among benchtop chemistry analyzers.

With its new compact design and best-in-class operator interface, it enables significant productivity and overall performance enhancements - not found in other chemistry analyzers in this class.

This system is perfect for primary, immediate, or back-up testing requirements. It offers minimal maintenance and effective use of consumables to provide a truly cost-effective operation.

**Cost effective solution
for small or medium-sized labs
for primary, STAT or back-up needs.**

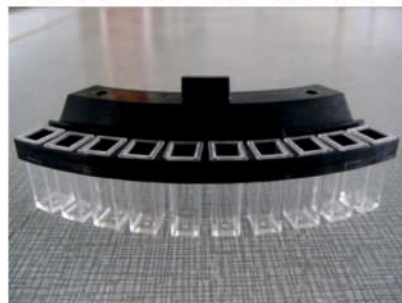
MAIN ADVANTAGES

- Reagent cooling system
- Automatic cuvettes detection & selection
- Automatic 7-step washing system
- Supported LIS interface
- On-board mixer
- Low Water consumption

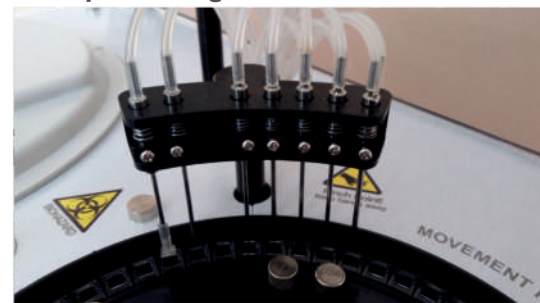
MINIMAL MAINTENANCE
is reducing your operational costs!



Low cost reusable cuvettes



7-step washing station



TECHNICAL SPECIFICATIONS

- Test Speed: 200 test / hour
- Assay method: End-point, Fixed-time (two point) Kinetic, Colorimetry, Turbidimetry, Two wavelength, Double reagent, multi-standard etc.
- Reagent Tray: 40 barcoded bottles
- Sample tray: 40 sample positions, samples can be placed randomly, including standard, QC, emergency sample
- Original tube or serum cup can be used
- Reagent tray: 40 reagent positions, 1 diluent position, 20ml reagent bottle, with 24-hour peltier refrigerated reagent tray
- Sample volume: 2-50 μ l, 0.1 μ l step
- Reagent volume: R1 150 ~ 300 μ l, R2 10 ~ 150 μ l, 1 μ l step
- Reaction volume: 150 ~ 300 μ l
- Reaction tray: 60 reusable plastic cuvettes
- Reaction temperature: 37 \pm 0.1 °C.
- Hot water ensures constant temperature in the reaction rotor
- Reaction cuvette: 5mm \times 6mm \times 25mm, optical path 5mm, metacryll cuvette
- Supported LIS
- 9 wavelengths: 340,405,450,510, 546,578,620, 660, 690 + 2 free
- Optical system: Static optical fiber system multi-wavelength spectrophotometer
- Light source: 12V, 20W long-life halogen lamp or LED optional
- Detecting cycle: 18 seconds
- Integrated bar-code reader



200 tests/hour

- Data Processing: Editing and storage for more than 300 testing parameters. Patients' information can be stored infinitely.
- Alarms for water & waste, sensors
- Absorbance linearity: 0.0000 ~ 4.0000 Abs
- Wavelength accuracy: \pm 2nm
- Repeatability: CV \leq 2,0%
- Stability: Within one hour, absorbance change is less than 0.01
- Altitude: below 3000m
- Interface: Instrument / computer: RS-232C, network port, touch screen possible
- QC: Multi QC function, QC diagrams can be stored, displayed and printed; Different QC material can be pre-set up; every test can take 3 different QC material
- Dimensions: 415mm(W) \times 565mm(L) \times 385mm(H)
Net Weight: 28 kg

NeoChem 20

Fully Automated Biochemistry Analyzer, up to 210 tests/h

NeoChem 20 is perfectly balanced between economy and quality, without any compromise.

Innovative technology and user friendly system meet all your requirements: simplicity, reliability, accuracy and competition.

OPTICAL SYSTEM

Static array spectrophotometer system composed of high resolution and halogen lamp, with 10 wavelengths for selecting (340nm, 405nm, 450nm, 492nm, 510nm, 546nm, 578nm, 630nm, 700nm, 800nm) and other two optional positions.

MAIN FEATURES

- Highly accurate optical system
- 24 hour non-stop cooling system to ensure reagents at 2-8°
- Durable ceramic syringes ensure high accuracy & precision
- Collision protection in both vertical and horizontal directions
- Automatic cuvettes detection & selection
- Automatic creating of new factors
- Selection of the best test point by reaction curve
- Support bi directional LIS and HIS interface

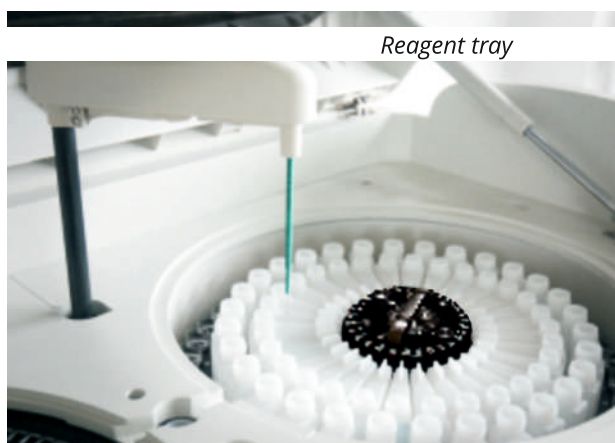


SAMPLE TRAY

71 sample positions, which consist of routine sample positions, standard positions, quality control positions, probe washing positions and STAT positions. Various samples can be placed randomly. Neonate ultra-micro quantity cup, primary tube and plastic tube are appropriate for those positions. Offers up to 20 virtual sample trays, 1080 samples could be edited simultaneously.

Cuvette Light Path provides 5mm, 6mm and 7mm light paths for selecting.

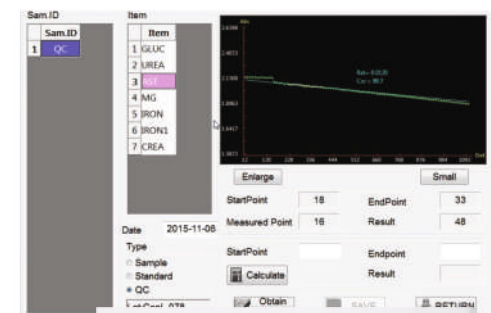
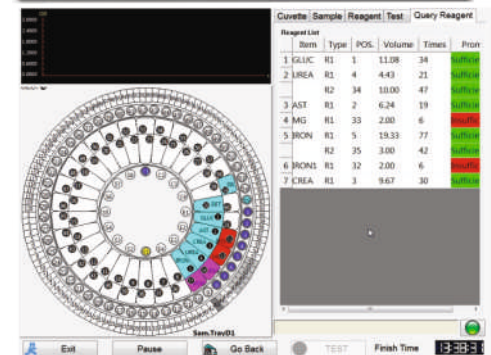
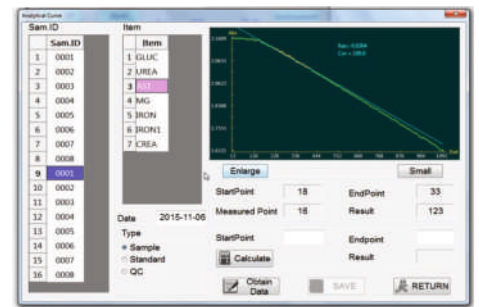
Reusable cuvettes available (quartz cup is optional)



Reagent tray

TECHNICAL SPECIFICATIONS

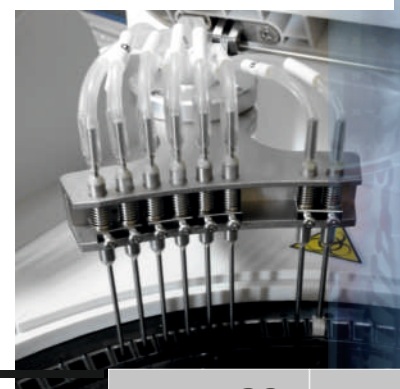
- Principle: Photoelectric colorimetry
- Assay methods: End Point, Kinetic, Fix time etc.
2 Point, End Point, 2 Point Kinetic, Dual wavelength
Blank, Immunoturbidimetry sample check, non-linearity
detection
- Throughput: up to 210 tests/h, Item Storage: Up to 1200
- Sample volume: 2~100ul, variable in 0.1ul increment
- Reagent volume: R1:10~500uL, R2: 10~500uL,
variable in 0.5uL increment
- Reagent tray: 60 reagent positions (including 1 detergent
position and 1 dilution position)
- Sample tray: 71 sample positions, including detergent,
standard, QC, STAT positions
- Reaction tray: 120 UV metacrill material reaction cuvettes
- Separate mixer probe
- Minimum reaction volume: 180uL
- Maximum reaction time: 22 minutes
- Water Consumption: less than 4L/hour under working status
- Light Source: Halogen lamp 12V/20W
- Absorbance Range: -0.5Abs-6.0Abs, resolution 0.0001Abs
- Resolution: 0.0001Abs
- Wavelength: 10 wavelengths optional (340nm~800nm)
- Wavelength Accuracy: ± 1 nm
- Barcode
- Reagent Refrigerating temperature: 2°C-8°C
- Cleaning unit: 8-step auto-washing system with detergent
- Calibration: Automatic selection of best test point by
reaction curve, no need for second calibration
Line/non-line; multi standard assay, LogH-Log 4P, Logit-Log5P,
Exponential function, Spline...
- Reaction Mixture Volume: 110uL~600uL (light path is 5mm),
130uL~750uL (light path is 6mm), 150uL~900uL
(light path is 7mm).
- Half Broadband: ≤ 6 nm
- Alarms
- Backup reagents position
- Automatic retesting with predilution
- Control: 3 level controls for each item, analysing and printing
QC analysis diagram
- Temperature control: incubator $37 \pm 0.1^\circ$
The outside insulated resistance of single fault: $\leq 0.1\Omega$.
- Power supply: 230V~, 50/60Hz, 850VA, Fuse: T8AL 250V
- Operating temperature: 10~35°, Rel. humid.: 40%~85%,
Atmospheric pressure: 86~106kPa
- **Low consumption,**
- **60 reagent positions, 25mL, 50 mL reagent bottle type supported**
- **71 sample positions including routine, stat, control and standard**
- **Up to 20 virtual sample trays can be programmed**



Accurate sampling



Automatic washing system



NeoChem 30

Fully Automated Biochemistry Analyzer, up to 310 tests/h

Solution that keeps your lab progressing forward.

Neochem 30 chemistry analyzer builds on a solid reputation of reliability, and provide fast and precise analysis complemented by outstanding low maintenance requirements and operator convenience.

Innovative technology and user friendly system meet all your requirements: simplicity, reliability, accuracy and competition.

MAIN FEATURES

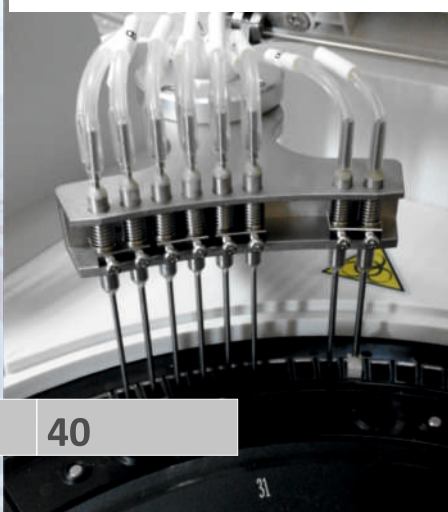
- Highly accurate optical system
- 24 hour non-stop cooling system to ensure reagent at 2-8°
- Durable ceramic syringes ensure high accuracy & precision
- Collision protection in both vertical and horizontal directions
- Automatic cuvettes detection & selection
- Automatic creating of new factors
- Selection of the best test point by reaction curve
- Support for bi-direction LIS interface



Accurate sampling



Automatic washing system



OPTICAL SYSTEM

Static array spectrophotometer system composed of high resolution halogen lamp, with 10 wavelengths for selecting (340nm, 405nm, 450nm, 492nm, 510nm, 546nm, 578nm, 630nm, 700nm, 800nm) and two free positions for optional wavelengths.

SAMPLE TRAY

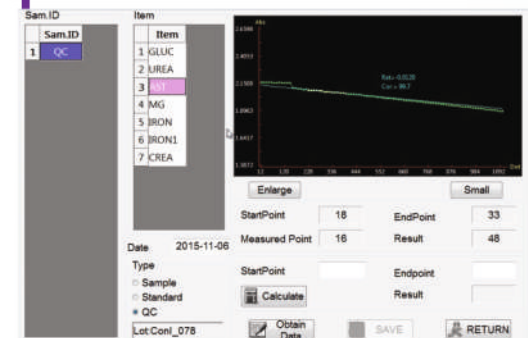
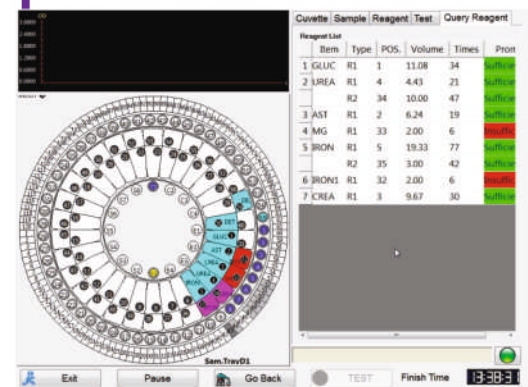
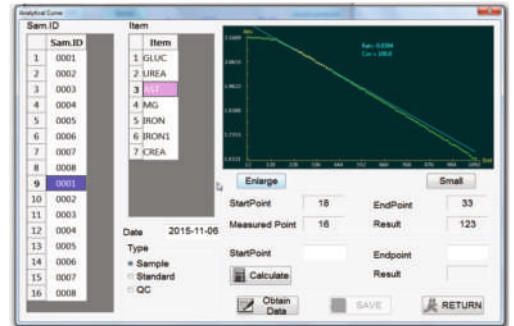
71 sample positions, which consist of routine sample positions, standard positions, quality control positions, probe washing positions and STAT positions. Various samples can be placed randomly. Neonatal ultra-micro quantity cup, primary tube and plastic tube are appropriate for those positions. Offers up to 20 virtual sample trays, 1080 samples could be edited simultaneously.

Reagent tray



TECHNICAL SPECIFICATIONS

- Principle: Photoelectric colorimetry
- Assay methods: End point, rate assay (kinetic method), Fixed time, 2-point end point, 1-point end point, (2-point kinetic method) dual-wavelength, blank method, immune turbidimetry sample inspection (serum index, as jaundice, hemolysis) non-linearity detection
- Throughput: up to 310 tests/hour
- Item Storage: Up to 1200
- Sample volume: 2~100ul, variable in 0.1ul
- Reagent volume: 5~500uL, variable in 0.5ul
- Reagent tray: 60 reagent positions, two size bottles
- Sample tray: 71 sample positions, including detergent, standard, QC, STAT positions
- Reaction tray: 120 UV metacrill cuvettes (quartz cup)
- Minimum reaction volume: 180uL
- Maximum reaction time: 18.3 minutes
- Water Consumption: $\leq 6L/hour$ under working status
- Light Source: Halogen lamp 12V/20W
- Absorbance Range: $-0.5Abs-6.0Abs$, resolution $0.0001Abs$
- Reagent Refrigeration: Refrigerator temperature is $2-8^{\circ}C$
- Wavelength: 10 wavelengths optional (340nm~800nm)
- Barcode
- Clean unit: 8-step auto-washing system with detergent and $37^{\circ}C$ water. Peltier element controller.
- Calibration: select best test point by reaction curve, no need for second calibration. 8 calibrations for each item.
- Control: 3 level controls for each item, Westgard, Levey-Jennings, Cumulative sum check, Twin plot Real-time QC, within-day QC, between-days QC
- Temperature control: incubator $37\pm 0.1^{\circ}C$
- Reaction Mixture Volume: 110uL~600uL (light path is 5mm), 130uL~750uL (light path is 6mm), 150uL~900uL (light path is 7mm)
- Wavelength Accuracy: $\pm 1nm$, Half Broadband: $\leq 6nm$
- The outside insulated resistance of single fault: $\leq 0.1\Omega$
- Alarms
- Backup reagents position
- Predilution re-testing
- Operating temperature: $10-35^{\circ}$, Rel. humid.: 40%~85%
- Atmospher pressure: 86~106kPa
- Power supply: $230(1\pm 10\%)V, 50/60Hz, 1000VA$,
- **Low consumption**
- **60 reagent positions, 25mL, 50 mL reagent bottle type supported**
- **71 sample positions including routine, stat, control and standard**
- **Up to 20 virtual sample trays can be programmed**



Reusable cuvettes

Cuvette Light Path

5 mm, 6mm and 7mm light paths are provided for selecting.



NeoChem 40

Fully Automated Biochemistry Analyzer, 420 tests/hour

Experience the Quality and Improve your results.

- **NeoChem 40** fully-automated chemistry analyzer improves operation efficiency and result integrity with a highly-developed clinical chemistry system for routine and special chemistry.
- Innovative technology and user friendly system meet all your requirements: simplicity, reliability, accuracy and competitiveness.
- **NeoChem 40** analyzer is an ideal solution for high-end hospitals, laboratories and clinics that look for more advanced technology, reliable, safe, accurate and easy to use instrumentation.

SAMPLE TRAY

80 sample positions consisting of routine sample positions, standard positions, quality control positions, probe washing positions and STAT positions.

Holding various samples on board, sample cups, neonatal ultramicro quantity cup, primary tube and plastic tube is appropriate for those positions.

Option for programming up to 20 virtual sample trays, allows 1320 samples to be edited simultaneously.

Cuvette: 90 UV metacryll cuvettes (quartz cup opt.)

Cuvette light path: 7mm light path

MAIN FEATURES

High-accuracy optical system

Durable ceramic syringes ensure high accuracy and precision

Collision protection in both vertical and horizontal directions

Automatic cuvettes' detection & selection

Automatic start from the last cuvette used

Selection of the best test point by reaction curve

Automatic creating of new factors

Support for bi-directional LIS and HIS interface

Internal bar-code reader (optional)

CHEMISTRY REAGENTS

- High-quality, ready-to-use liquid reagents tailored for use on this instrument provide the complete biochemistry solution and ensure maximum comfort of use.



OPTICAL SYSTEM

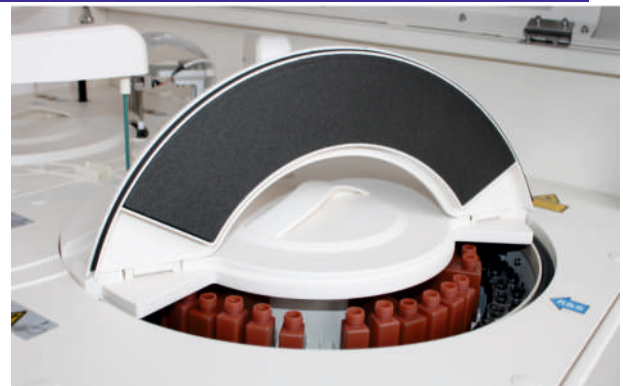
Concave holographic aberration-reduced grating, array photodiode, rear spectrophotometry optical system with 12 wavelengths. LED source lamp.

Reagent refrigeration

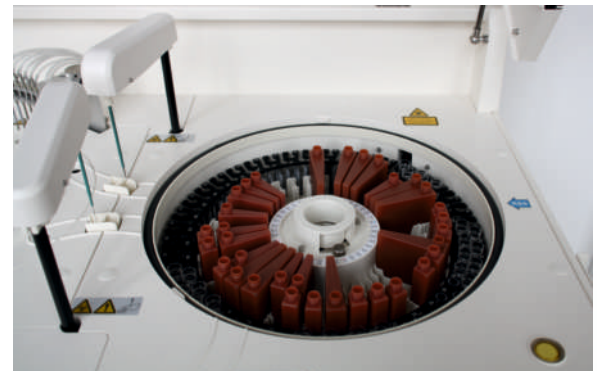
24-hour non-stop refrigeration function, the refrigerated temperature is 2-8°C.

TECHNICAL SPECIFICATIONS

- Principle: Photoelectric colorimetry
- Assay methods: End Point, 2-Point End Point, Kinetic (Rate Assay), 2-Point Kinetic
- Throughput: 420 tests/hour, 600 tests/hour with ISE - optional Item storage: up to 1200
- Sample volume: range 2-35 μ l in 0,05 μ l step
- Reagent volume: 10-300 μ l in 0,05 μ l step/dedicated 2 reagent arms (R1 &R2)
- Reagent tray: 80 positions (20mL,50mL and 70mL bottles) on removable tray.
- Sample tray: 80 sample positions, including routine sample positions, standard positions, QC positions, detergent positions and STAT positions.
- Reaction volume: up to 900 μ l (light path is 7mm)
- Maximum reaction time: 9,3 minutes
- Water consumption: less than 12L/hour under working status
Light source: Halogen lamp 12V/20W
- Absorbance range: -0.5Abs-6.0Abs; Resolution: 0,0001Abs
Half broadband: \leq 6nm
- Spot photometry with digital high speed transmission system.
- Static state grating optical system.
- Wavelengths: 12 wavelengths (340nm, 405nm, 450nm, 480nm, 505nm, 546nm, 570nm, 605nm, 660nm, 700nm, 750nm, 800nm) using grating; Wavelength accuracy: \pm 1nm
- Cleaning unit: 8-step auto-washing system
- Control rules: Westgard multi-rule, Cumulative sum check, Twin plot
- Calibration: selecting best test point by reaction curve, no need for second calibration
- Temperature control: incubator 37 \pm 0.1 $^{\circ}$ C
Power supply: AC220 (1 \pm 10%)V, 50/60Hz
- Operating temperature: 10-35 $^{\circ}$ C
- Relative humidity: 40%~85%, Atmospheric pressure: 86~106kPa
Power: 1100 VA



Easy and safe access to reagent



Reagent tray

CALIBRATION METHOD

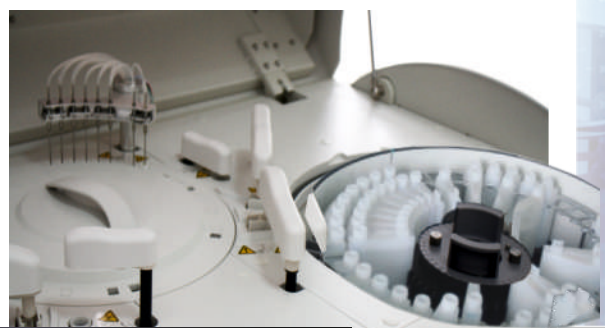
Single point, multi point and non-linearity calibration.

Multiple calibration formula including Logit-Log4P, Logit-Log5P and exponential function

12 calibrations in different concentration can be used for each item.



Washing station



NeoChem

Semi-automated Biochemistry Analyzer

- Convenient maintenance design
- Easy TOUCH SCREEN operation
- 8 inner incubation positions
- Bar-code reader supported



Semi-automated Chemistry Analyzer based on the principle of photoelectric colorimetry, with micro-computer, touch screen and fiber optics.

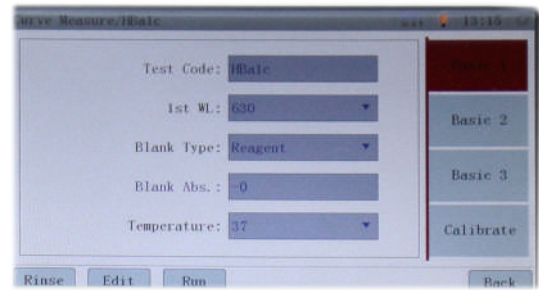
It is intended for use in conjunction with certain reagents to perform quantitative in vitro chemistry and immunology tests on a variety of clinical samples, such as serum, urine, cerebrospinal fluid and plasma.

TECHNICAL SPECIFICATIONS

- Test method: Photoelectric colorimetry principle
- Assay modes: Endpoint, Kinetic, 2-point Kinetic, and Dual WL., ABS .
- Optical system: Spectrophotometry optical system with high-resolution filter and halogen light. There are 8 wavelengths to select (340nm, 405nm, 492nm, 510nm, 546nm, 578nm, 630nm, 700nm), and the wavelength range is 300nm~800nm , fiber optics ensure reading on all wavelengths
- Test items: ≥300.
- Light source: 6V/10W long-life halogen lamp with auto-sleep function.
- Screen: 7-inch color touch screen, resolution 800×480 with adjustable screen brightness
- Testing time: 0~999 seconds. It's programmable
- Delayed time: 0~999 seconds. It's programmable
- Colorimetric system: 32μL flowing quartz cuvette or stainless steel quartz cuvette
- Optical diameter: 10mm
- Aspirating volume: 100μL~9999μL, 500μL is recommended.
- Micro flowcell
- Precise peristaltic pump
- Single start key
- Aspirating accuracy: ±3μL
- Temperature control: 37°C and room temperature
- QC function: QC and statistics functions QC curve displayed
- Monitoring of the reaction process: Monitoring of the abnormal reaction, such as substrate exhaust, and display of the reaction curve in real time. Instrument can also be connected to the computer by specific software for advanced data management.
- Result storage: 300 general items' parameters, 20 curve items' parameters and 30000 test results
- Printing output: Instrument can be connected to an external printer

- External interface: 1 SD interface, 3 USB interfaces, 1 PS/2 interface, 1 parallel interface and 1 RJ-45 interface
- Half broadband: $\leq 10\text{nm}$
- Network: Support LIS/HIS connection
- Integrated printer
- Available veterinary application
- Power: AC200~240V; 50/60Hz
- The outside insulated resistance of single fault: $\leq 0.1\Omega$
- Repeatability: $\text{CV} \leq 1.0\%$.
- Cross contamination: $\leq 1.0\%$
- Accuracy and fluctuation of cuvette's temperature: Cuvette's temperature accuracy bias does not exceed $\pm 0.2^\circ\text{C}$; and temperature fluctuation does not exceed $\pm 0.1^\circ\text{C}$.
- Drift rate of absorbance: $\leq 0.005\text{Abs}/20\text{min}$
- Photometric range: $-0.3\text{Abs} \sim 4.0\text{Abs}$
- Carry-over: $\leq 1.0\%$ (Fixed cuvette is inapplicable)
- Environment temperature: $10^\circ\text{C} \sim 32^\circ\text{C}$
- Relative humidity: 40%~85%
- Atmospheric pressure: 86kPa~106kPa
- Fuse: T2AL 250V
- Printer: Built-in thermal printer
- Dimensions: 36(L) x 34(W) x 16(H) cm
- Net weight: 5,9kg, Gross weight: 11,2kg

Display



8 Incubation positions

