# Medical Analyzers









# Hematology/Chemistry MEDICAL ANALYZERS

## HA-17600, 2 Counting Channels Hematology Analyzer With Touch Screen



#### Features:

- 20 parameters+3 histograms.
- 2 counting channels, 3-part differentiation of WBC.
- 2 Counting mode: whole blood and pre diluted.

Model	HA-17600
Parameters	WBC, LYM#, MID#, GRA#, LYM%, MID%, GRA%, RBC, HGB, MCHC, MCH, MCV, RDW-CV, RDW-SD, HCT, PLT, MPV, PDW, PCT, P-LCR and Histograms for WBC, RBC and PLT
Principles	Electrical resistance for counting WBC, RBC and PLT
Performance	Parameter Precision (CV %): WBC (109/L) 2.0(7.0- 15.0) RBC (1012/L) 1.5(3.50-6.00), HGB (g/L) 1.5(110 - 180) MCV (fL) 0.4(80.0 - 110.0), PLT (109/L) 4(100 - 500)
Sample Volume	Prediluted: 20µL, Whole Blood: 9.8µL
Aperture Diameter	WBC 80µm; RBC 50µm
Throughput	60 samples per hour
Display	10.4" TFT Color LCD with touch screen, Resolution: 800×600
Alarms	Error messages
Carryover	WBC/RBC/HGB<0.5%, PLT<1.0%
Input/Output	RS-232, USB, LAN, keyboard and mouse interface
Printout	Thermal printer, 55mm width paper, various printout formats, external printer optional
<b>Operating Environment</b>	Temperature: 15°C~35°C; Humidity: 10%~90%
Power Requirement	AC 110-220V, 50/60Hz
Dimension(mm)	L436×W363×H367
Weight	18Kg

• 60 samples per hour • Up to 50000 sample results (including histograms) can be stored • 10.4'' TFT color LCD with touch screen • Built-in thermal printer, optional external printer • External AC adapter avoids electronic noises, enhancing accuracy • Multi-language software available on request.

Mode

## SACA-11904C, High Quality Chemistry Analyzer With 7 Filters, Color LCD



#### Features:

- Easy Windows operation system with mouse, large color LCD display.
- Reagent open system supports flow cell and cuvette mode, close system on request
- Analytical modes include kinetic, fixed time, bichromatic end point with/without reagent blank or sample blank, linear or

Model	2ACA-11904C
Principle	Absorbance
Photometric range	-0.500~3.000Abs
Resolution	0.001Abs (displayed), 0.0001Abs (calculated)
Light Source	Halogen lamp
Wavelengths	340, 405, 500, 546, 578, 620, 670nm, 1 more filter optional
Wavelength Accuracy	±1nm
Band Width	8nm
Aspirate Volume	100~300µL
Carryover	<0.1%
Memory	160 test protocols, minimum 500 test result
Interface	RS-232, USB, SD card interface
Flow Cell	25µL Metal-quartz flow cell
Cuvette Mode	12.5mm x 12.5mm cuvette optional
<b>Temperature</b> Control	25°C, 30°C, 37°C, ±0.1°C
Display	7" color LCD
Input	USB mouse and external keyboard
Output	Build-in printer or external printer (optional)
Net Weight	8KG
Dimensions(mm)	L460×W330×H140
Power supply	AC 110-220V±10%, 50~60Hz

SACA\_11904C

non-linear calibration curves • Real-time curve monitoring enhances the reliability of result • Large memory, up to 160 test protocols can be programmed • Powerful QC function: Westguard Multi-rule, Levey-Jennings plot, 2 controls per test • Auto self-check when power on • With lamp sleeping and wake-up function • Easy software upgrade by SD card, support USB mouse and keyboard • Multiform result output including patient comprehensive report • Compact design enables USER-DIY maintenance • Multi-language software available on request.

## SACA-11904CV, Semi-Auto Chemistry, High Quality Analyzer Special For Veterinary Use



#### Features:

- Easy Windows operation system with mouse, large color LCD display.
- Support up to 12 kinds of animal: 8 kinds fixed, 4 kinds open.
- 34 most common tests fixed, 20 more can be defined by user.
- Reagent open system supports flow cell and cuvette mode, close system on request.

Model	SACA-11904CV
Principle	Absorbance
Photometric range	-0.500~3.000Abs
Resolution	0.001Abs (displayed), 0.0001Abs (calculated)
Light Source	Halogen lamp
Wavelengths	340, 405, 500, 546, 578, 620, 670nm, 1 more filter optional
Wavelength Accuracy	±1nm
Band Width	8nm
Aspirate Volume	100~300µL
Carryover	<0.1%
Memory	54 test parameters,up to 500 sample results
Interface	RS-232, USB, SD card interface
Flow Cell	25µL Metal-quartz flow cell
Cuvette Mode	12.5mm x 12.5mm cuvette optional
Temperature Control	25°C, 30°C, 37°C, ±0.1°C and ambient temperature
Display	7'' color LCD(640 x 240, 256 colors)
Input	USB mouse and external keyboard
Output	Build-in printer or external printer (optional)
Net Weight	8KG
Dimensions(mm)	L460×W330×H140
Power supply	AC 110-220V±10%, 50~60Hz

• Analytical modes include kinetic, fixed time, bichromatic end point with or without reagent blank or sample blank, linear or non-linear calibration curves • Real-time curve monitoring enhances the reliability of result • Powerful QC function: Westguard Multi-rule, Levey-Jennings plot, 2 controls per test • Auto self-check when power on • With lamp sleeping and wake-up function • Easy software upgrade by SD card, support USB mouse and keyboard • Compact design enables USER-DIY maintenance • Multi-language software available on request Analytical modes include kinetic, fixed time, bichromatic end point with or without reagent blank or sample blank, linear or non-linear calibration curves • Real-time curve monitoring enhances the reliability of result • Powerful QC function: Westguard Multi-rule, Levey-Jennings plot, 2 controls per test • Auto self-check when power on • With lamp sleeping and wake-up function • Easy software upgrade by SD card, support USB mouse and keyboard • Compact Multi-rule, Levey-Jennings plot, 2 controls per test • Auto self-check when power on • With lamp sleeping and wake-up function • Easy software upgrade by SD card, support USB mouse and keyboard • Compact design enables USER-DIY maintenance • Multi-language software available on request.

## SACA-19100, Semi-Auto Chemistry, Grating Inside, PC Controlled



#### Features:

- PC controlled system, Windows XP, displays the reaction curve in real-time.
- Continuously adjustable grating, enhances the stability and reliability of result.

Model	SACA-19100
Principle	Absorbance
Absorbance Range	-0.500 ~ 3.500Abs
Resolution	0.001 Abs (displayed), 0.0001Abs (calculated)
Light Source	Halogen lamp
Wavelengths	Continuously adjusted grating, wavelength range is 330 – 800nm, 1nm by step adjustment
Wavelength Accuracy	± 1nm
Band Width	< 6nm
Flow cell	Metal – quartz flow cell
Temperature Control	25°C,30°C,37°C,±0.1°C and ambient temperature
Carryover	< 1%
Memory	300 test protocols, up to 10000 test results, support SD to expand memory
Printer	All printers compatible with Windows
Interface	RS-232, USB
Power Supply	AC 100V - 240V ± 10%,50-60Hz
Net Weight	9KG
Dimensions (mm)	L368xW192xH266

• Reagent-open system supports flow cell & cuvette mode, close system on request • Analytical modes include kinetic, fixed time, bichromatic end point with or without reagent blank or sample blank, linear or non-linear calibration • Powerful QC program: Westguard multi-rule, Levey-Jennings plots, 2 controls per test • Large memory, up to 300 test protocols can be stored • Multiform result output including patient comprehensive report • Compatible with all popular external printers connected to PC • Easy communication with PC • Powerful internet connection enables remote data sharing and OS update • Compact design enables USER-DIY maintenance • Multi-language software available on request.

## SACA-19600, Semi-Auto Chemistry, Grating Inside, Touch Screen And USB



#### Model SACA-19600 Principle Absorbance Absorbance Range -0.500 ~ 3.500Abs Resolution 0.001 Abs (displayed), 0.0001Abs (calculated) **Light Source** Halogen lamp Continuously adjusted grating, wavelength range is 330 – 800nm, 1nm by step adjustment Wavelengths Wavelength Accuracy + 1nm **Band Width** < 6nm Flow cell Metal - quartz flow cell **Temperature Control** 25°C,30°C,37°C,±0.1°C and ambient temperature Carryover < 1% 200 test protocols, up to 10000 test results, support SD Memory to expand memory 6.4" color/mono LCD Display Interface RS-232, support VGA,2 USB, SD, Ethernet Output Built-in printer, or external printer (optional) Input Touch screen, USB mouse and keyboard optional AC 100V - 240V ± 10%,50-60Hz **Power Supply Net Weight** 11KG **Dimensions (mm)** L370xW284xH318

#### Features:

- Easy Windows operation system with large touch-screen.
- Displays the reaction curve in real-time.

 Continuously adjustable grating, enhances the stability and reliability of result
 Reagent-open system supports flow cell and cuvette mode, close system on request • Analytical modes include kinetic, fixed time, bichromatic end point with or without reagent blank or sample blank, linear or non-linear calibration • Powerful QC program: Westguard multi-rule, Levey-Jennings plots, 2 controls per test • Large memory, up to 200 test protocols and 10000 results can be stored, compatible with SD card • Multiform result output including patient comprehensive report • Multi-interface support RS-232, VGA, USB, SD and Ethernet • Easy communication with PC • Powerful internet connection enables remote data sharing and OS update • Compact design enables USER-DIY maintenance • Multi-language software available on request.

## SACA-19900, Semi-Auto Chemistry, Grating Inside, Easy Keypad Operation With LCD Display



#### Features:

- Easy keypad operation with LCD display
- Continuously adjustable grating, enhances the stability and reliability of result.
- Reagent open system supports flow

cell and cuvette mode, close system on request • Analytical modes include kinetic, fixed time, bichromatic end point with or without reagent blank or sample blank, linear or non-linear calibration curves • Powerful QC program: Westguard multi-rule, Levey-Jennings plots,2 controls per test • Large memory, up to 204 protocols and 5400 results can be stored • Additional recloser design with lamp saving • Powerful internet connection enables remote data sharing & OS update • Compact design enables USER-DIY maintenance • Multi-language software available on request.

Model	SACA-19900
Principle	Absorbance
Absorbance Range	-0.500 ~ 3.500Abs
Resolution	0.001 Abs (displayed), 0.0001Abs (calculated)
Light Source	Halogen lamp
Wavelengths	Continuously adjusted grating, wavelength range is 330 – 800nm, 1nm by step adjustment
Wavelength Accuracy	± 1nm
Band Width	< 6nm
Flow cell	Metal – quartz flow cell
<b>Temperature Control</b>	25°C,30°C,37°C,±0.1°C and ambient temperature
Aspirate Volume	0~3000µl
Carryover	< 1%
Memory	Up to 204 protocols and 5400 results can be stored
Display	LCD display
Interface	RS-232
Output	Built-in printer, or external printer (optional)
Power Supply	AC 110V - 220V ± 10%, 50-60Hz
Net Weight	8KG
Dimensions (mm)	L360xW318xH185

# MEDICAL ANALYZERS Fully-Automated Chemistry

## FACA-1240, Fully Automated Chemistry, Discrete, Constant Throughput 120 Test/Hours, Random Access



- Random Access automated chemistry analyzer, compact size
- Constant throughput of 120 tests/hour
- Automatic 8 steps washing system, Low carryover
- Labor saving. Simple programming and walk-away operation
- 24 hours non-stop Reagent cooling compartment
- Reagent open system, close system on request
- Micro-volume for sample and reagent
- User-friendly software based on Windows XP, simplicity and flexibility of operation
- LIS interface support (optional)
- Multi-language software (optional).

#### Technical Specifications: System Function

Model	FACA-1240
Automatic, Random Access	Yes
STAT sample priority	Yes
Barcode-Reading support	Optional
Throughput	200 tests/hour, Constant throughput around 120 tests/hour
Contents of the testing	Clinical chemistry, Immunoturbidimetric
Analytical modes	End-point, Two-point, Kinetic, Single/Dual/reagent chemistries, Monochromatic/ bichromatic, Linear/non-linear multipoint calibration
Programming	Open system with user defined programs & calculation

#### Sample/Reagent Handling

Sample/Reagent tray	40 positions for samples and 40 positions for reagents in refrigerated compartment
Refrigerated temp.	4 ~ 15°C
Reagent volume	R1: 180 ~ 450 μL, 1 μL adjustable R2: 30 ~ 250 μL, 1 μL adjustable
Sample volume	3 $\sim$ 45 µL, 0.5 µL adjustable
Sample & Reagent probe	Collision protection, Liquid level detection & Inventory checking
Probe cleaning	Automatic washing both inside & outside, carry over <0.1%

Pre-heating for reagent

#### **Reaction System**

Reaction positions	81 cuvettes, 9 cuvettes/strip
Cuvette	Optical length 5mm
Reaction volume	180 ~ 500µl
Reaction temp.	37℃, fluctuation ±0.1℃

Independent mixing probe, Automatic washing system

#### Measuring and Optic System

Lamp	Halogen lamp
Absorption range	0 ~ 3.500Abs±1%
Wavelengths	8 wavelengths, including 340nm,405nm,450nm,510nm, 546nm,578nm,630nm,670nm
Resolution	0.0001ABS

#### **Working Condition**

Power supply	AC 220V 50/60 Hz
Temperature	20 ~ 30°C
Humidity	35 ~ 80%
Water consumption	2.5 ~ 10 L/hour
Dimension (cm)	L800xW600xH650
Gross weight	Bench top: 100KG



# Fully-Automated Chemistry MEDICAL ANALYZERS

#### FACA-1120, Auto Chemistry Analyzer



#### Features:

- Automatic, random Access
- Up to 100 tasts per hour
- Labor saving. Simple programming and real walk-away operation
- Reagent open system, close system on request
- Micro-volume for sample and reagent
- User-friendly software, simplicity and flexibility for operation
- Multi-language software available.

#### **Technical Specifications: System Function**

Model	FACA-1120
Automatic, Random Access	Yes
STAT sample priority	available for all sample position
Throughput	Constant throughput 60 tests/hour (double reagent); 90 tests/hour (single reagent)*
Contents of the testing	Clinical chemistry, Immunoturbidimetric
Analytical modes	End-point, Two-point, Kinetic,

\* Insert PC system with touch screen

#### System Tray

Sample position	9 positions for samples
Sample volume	3 ~ 45µL, 0.5µL adjustable
Flexible sample position design	MAX: 42 sample positions

#### **Reagent Tray**

Reagent position	26 positions for reagent
Reagent volume	R1: 180 ~ 450 μL, 1 μL adjustable R2: 3 ~ 450 μL, 1 μL adjustable

#### **Reaction System**

Reaction positions	90 cuvettes, 10 cuvettes/strip
Cuvette	Optical length 5mm
Reaction volume	180 ~ 500µl
Reaction temp.	37℃, fluctuation ±0.3℃

1 mixing probe

#### Probe

Pro-heating for reagent	Yes
Collision protection, Liquid level detection and Inventory checking	Yes

Automatic inner and outer probe washing after every cycle, carry-over<0.1%

#### Measuring and Optic System

Lamp	Halogen Lamp
Absorbance range	0 ~ 3.500 ABS
Wavelengths	8 wavelengths from 320 ~ 850 nm
Resolution	0.0001 ABS

#### **Working Condition**

Power supply	100 ~ 240 VAc 50/60 Hz,1500w
Temperature	10 ~ 35°C
Humidity	35 ~ 80%
Water consumption	<3 L/hour
Dimention	L630xW480xH510mm
Net Weight	70 KG

## CA-01C, 1-Channel Coagulometer With Internal Printer



#### Features:

- 1 channel (LED detector).
- Easy keypad operation with LCD display.
- Internal thermal-sensitive printer; Electronically-linked Pipette optional.
- Reagent position with magnetic rotor.
- Scattered light and percentage analysis ensure good results
- Open reagent system with low consumption, close reagent on request.
- Large memory to store up to 6000 test results.
- QC & calibration program incorporated.
- Auto self-check when power on.

Model	CA-01C	
Analysis Parameters	PT, APTT, TT, FIB, F2, F5, F7, F8, F9, F10, F11, F12, Heparin, APC-R, Protein S, Protein C	
Principle	Scattered light with percentage analysis	
Sample Volume Required	PT: 25ul, APTT: 25ul, TT: 25ul, FIB: 25ul	
Testing Channel	1 Channels	
Light Source	Durable LED detector	
Sample Position	5 positions	
<b>Reagent Position</b>	2 positions (1 magnetic mixer included)	
Testing Time	Normally 20~60 secs, Maximum time up to 600 secs	
Minimum Reagent Consumption	30µL for APTT, 50µL for FIB, PT, APTT	
Position Warming-up	37°C(±0.5°C)	
Memory	6,000 test results	
Display	LCD display	
Interface	RS-232	
Input	Easy operation keypad	
Output	Internal printer	
Power supply	AC 110-220V±10%, 50~60Hz	
Net Weight	5KG	
Dimension (mm)	L270xW270xH120	

## CA-02C, 2-Channel Coagulometer With Internal Printer



#### Features:

- 2 channel (2 durable LED detectors for 2 different parameters analysis)
- Easy keypad operation with LCD display
- Internal thermal-sensitive printer; Electronically-linked Pipette optional
- Reagent position with magnetic rotor.
- Scattered light and percentage analysis ensure good results.
- Open reagent system with low

Model	CA-02C	
Analysis Parameters	PT, APTT, TT, FIB, F2, F5, F7, F8, F9, F10, F11, F12, Heparin, APC-R, Protein S, Protein C	
Principle	Scattered light with percentage analysis	
Sample Volume Required	PT: 25μl, APTT: 25μl, TT: 25μl, FIB: 25μl	
Testing Channel	2 Channels	
Light Source	Durable LED detector	
Sample Position	5 positions	
<b>Reagent Position</b>	2 positions (1 magnetic mixer included)	
Testing Time	Normally 20~60 secs, Maximum time up to 600 secs	
Minimum Reagent Consumption	$30\mu L$ for APTT, $50\mu L$ for FIB, PT, APTT	
Position Warming-up	37°C(±0.5°C)	
Memory	6,000 test results	
Display	LCD display	
Interface	RS-232	
Input	Easy operation keypad	
Output	Internal printer	
Power supply	AC 110-220V±10%, 50~60Hz	
Net Weight	5KG	
Dimension (mm)	L270xW270xH120	

consumption, close reagent on request • Large memory to store up to 6000 test results • QC and calibration program incorporated • Auto self-check when power on • Multi-language software available on request.

# Coagulation/Urine MEDICAL ANALYZERS

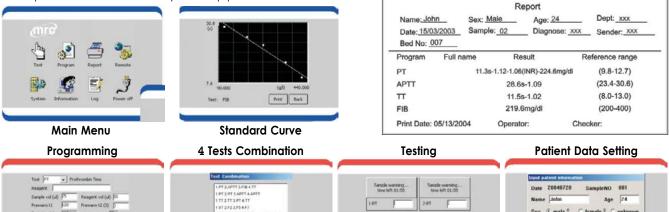
## CA-04C, 4-Channel Coagulometer With Touch Screen



#### **Features:**

- 4 channels (4 durable LED detectors for 4 different parameters analysis).
- Easy Windows operation system with touch screen or mouse, large LCD display.
- Advanced scattered light principle and percentage analysis ensure accurate results.
- Low reagent consumption.
- Large memory, up to 10,000 results can be stored
- QC and calibration program incorporated

 Multiform result output including patient comprehensive report • Easy software upgrade by SD card, support USB mouse & keyboard • Auto self-check when power on • Electronically-linked pipette.



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Isactive)		-	Reset Back	G OK Back

UA-15, Compact Size for Urine Test	Model	UA-15
	Test Items	Ascorbic Acid, Bilirubin, Blood, Glucose, Ketone, Leucocytes, Nitrite, PH, Protein, Specific Gravity, Urobilinogen
Marsine Readyners Cardination	Throughput	Normal mode, 60 samples/hour; Continuous mode, 120 samples/hour
10.54.19 Optimes	Display	5" Large LCD
	Memory	1000 sample results
	Output	Built-in thermal printer
	Interface	RS-232
	Power supply	AC 110-220V±10%, 50~60Hz
	Net weight	2KG
UA-15	Dimensions(mm)	L185×W260×H157

 Compact size, low weight
 11 test items; Cold light source, high luminosity with long life time
 5" large LCD display Auto save data in case of power failure • Up to 1000 results can be stored • Build in thermal printer • Easy connection with PC by RS-232 • Easy accessible design enables USER-DIY maintenance.

Model	CA-04C			
Analysis Parameters	PT, APTT, TT, FIB, F2, F5, F7, F8, F9, F10, F11, F12, Heparin, APC-R, Protein S, Protein C			
Principle	Scattered light with percentage analysis			
Sample Volume Required	PT: 25ul, APTT: 25ul, TT: 25ul, FIB: 25ul			
Testing Channel	4 Channels			
Light Source	Durable LED detector			
Sample Position	24 positions			
<b>Reagent Position</b>	6 positions (1 magnetic mixer included)			
Testing Time	Normally 20~60 secs, Maximum time up to 600 sec			
Minimum Reagent Consumption	25µL for TT, FIB, PT, APTT			
Position Warming-up	37°C(±0.5°C)			
Memory	10,000 test results			
Display	6" LCD display			
Interface	RS-232, USB, SD card interface			
Input	Touch panel or USB mouse			
Output	External printer (optional)			
Power supply	AC 110-220V±10%, 50~60Hz			
Net Weight	8KG			
Dimension (mm)	L410×W310×H160			



#### **Status Menu**



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## FACO-050, Auto Coagulation Analyzer

#### Features:

- Random Access, smart and compact
- Clotting, Chromogenic, Immunologic measuring methods
- User friendly touchscreen interface, simple & easy to operate
- High throughput routine assays
- Labor saving, simple programming and real walk-away system
- Reagent open system, close system on request
- Multi-language software (optional).

#### System Function:

- Throughput: 60 tests/hour for PT
  - 50 tests/hour for PT and APTT
- Parameters: PT. APTT. TI. FIB, AT-ш. PLG,
  - D-Dimer. FDP, etc.
- Measuring methods:

Clotting: Scattered Light Detection method Chromogenic: Colorimetric method, 405nm Immunologic: Turbidimetric method, 575nm

- Memory: 100,000 test results and 10,000 reaction curves
- Quality control: 12 QC File\*10 test items"30 curve"
  - 12 month
- Calibration, 6 points"10 items
- Automatic, Random Access
- STAT sample priority
- Barcode-reading support (optional).



7 Detection Channels

- 5 for clotting assays
- 1 for chromogenic assays
- 1 for immunologic assays.



Sample/Reagent Probe with Liquid Level Detection.

#### Sample Tray:

- Sample tray: 27 positions. user-defined STAT
- Incubation temperature: 37±0.5°C.

#### Reagent Tray:

- Reagent tray: 23 positions
- Reagent cooling: ≤16°C.

#### **Reaction Tray:**

- Cuvettes on board, 72
- Min reaction volume: 150ul
- Reaction temperature: 37±0.5°C.

#### Probe:

- With probe pre-heating
- Automatic washing both inside and outside
- With collision protection, liquid level detection and Inventory checking.

#### Print out:

• Built-in thermal printer, external printer optional.

## Measuring and Optic System:

Light: LED
 Power: AC 11 0/240V, 50-60± 1 Hz
 Temperature:10°C-30°C, humidity ≤85%
 Water consumption: <0.5L/hour</li>
 Dimension LxWxH (rnm ) : 660x580x510
 Weight: 53KG.



#### ELA-6000, Electrolyte Analyzer



#### Test range and accuracy:

Cho	annel	Range	Resolution	CV%
F	эΗ	4.00 ~ 9.00	0.01	< 0.5
	K⁺	0.50 ~ 15.00 mmol/L	0.01	< 1.0
N	la⁺	30.0 ~ 200.0 mmol/L	0.1	< 1.0
(	CI	20.0 ~ 200.0 mmol/L	0.1	< 1.0
С	a++	0.1 ~ 6.0 mmol/L	0.01	< 1.5
TCO2+         2.0 ~ 70.0 mmol/L         0.1         < 3.0		< 3.0		
	Li⁺	0.1 ~ 5.0 mmol/L	0.01	< 2.0

#### Working environment:

Ambient Temperature	5°C ~ 35°C	
Relative Humidity	≤ 85%	
Sun Radiation	Avoid direct sunshine	
Power Supply	AC 220V±10V (50/60HZ)	

Sample type: Plasma, Serum, Blood, Urine Main characters: **Features:** 

- Larger LCD with touch-screen(320x240)
- Self-made maintenance free electrodes
- Sleep mode to save reagent
- Rapid test speed. 25 seconds/test
- Min-volume sample consumption: 60IL
- Reagent pack to avoid pollution
- On-line instructions provided for self problem-solving
- Protection function when powered-off suddenly
- Setting any time to power-off the equipment, to save reagent when free
- Randomly choose any combination of pH, K, Na, CI, Ca, TC02, li, Ag channels.

#### ELA-5100, Electrolyte Analyzer



#### Features:

- Self-made maintenance free electrodes
- Sleep mode to save reagent
- Rapid test speed. 30 seconds/test
- Min-volume sample consumption: 651IL
- Reagent pack to avoid pollution
- On-line instructions provided for self problem-solving
- High efficient cleaning procedures, best for fatty samples
- High, middle and low QC values provided to adjust linearity
- Randomly choose any combination of pH, K, Na, Cl, Ca, Li channels
- Automatic one point & two points calibration with additional manual calibration.

Flow Path	Fluid Moving system	
Reagent pack	Calibration solution in a single reagent pack	
Calibration	Automatic or On-demand	
Memory Storage	Up to 1000 patient result, extended to be over 20000 results	
Analyzing Time	25 seconds after aspiration	
Sample Volume	60~300µL whole blood or serum	
Input	Touch screen(with operation menu)	
Output	Internal thermal-printer ; RS232	
Auto sampler	- 35 samples volume (for optional function) - 39x31.5x36cm, N.W: 6.5kg	
Waste Storage	Closed Pack System	
Reagent Pack	Closed Reagent System	
Dimensions	42x37x56 cm	
Net weight	16 kg	

#### Sample type: Plasma, Serum, Blood, Urine

#### Test range and accuracy:

Channel	Range	Resolution	CV%
рН	6.00 ~ 9.00	0.01	< 1.0
K⁺	0.50 ~ 10.00 mmol/L	0.01	< 1.0
Na⁺	20.0 ~ 200.0 mmol/L	0.1	< 1.0
Cl	20.0 ~ 200.0 mmol/L	0.1	< 1.0
Ca <sup>++</sup> 0.3 ~ 5.0 mmol/L 0.01 < 1.5		< 1.5	
Li⁺	0.1 ~ 3.0 mmol/L	0.01	< 1.5

#### Working environment:

Ambient Temperature	5°C ~ 40°C	
Relative Humidity	≤ 85%	
Sun Radiation	Avoid direct sunshine	
Power Supply	AC100-240V(50/60HZ)	

#### Main characters:

Flow Path	Fluid Moving system	
Reagent pack	Calibration solution in a single reagent pack	
Calibration	Automatic or On-demand	
Memory Storage	Up to 1500 patient result, 199 normal QC, 199 Abnormal QC	
Analyzing Time	30 seconds after aspiration	
Sample Volume	Minimum 65µL whole blood or serum	
Display	Wide LCD (240x128)	
Input	Keypad (16 alphabet Numeric display, YES or NO)	
Output	Internal thermal-printer ; R\$232	
Waste Storage	Closed Pack System	
Reagent Pack	Closed Reagent System	
Dimensions	30x26x36 cm	
Net weight	7.5 kg	

## ESRA-300, ESR Analyzer



## Technical Specification:

recinical specification:		
Model	ESRA-300	
Application area	Erythrocyte sedimentation rate analysis	
Measuring principle	Infrared sensor	
Reading channels	30 available channels	
Loading capability	Up to 30 samples at a time	
Loading pattern	Random	
Measuring time	30 minutes or 60 minutes selectable	
Throughput	Up to 60 samples per hour	
Analysis result	In Westergren ESR value (mm/hr)	
Temperature compensation	Refer to 18°C automatically (selectable)	
Reading resolution	0.2mm	
Reproducibility         < 0.3% or 2mm/1h		
Result resolution 1mm/1h		
Blood level range	50mm ~ 64mm	
Display	LCD	
Input	Touch screen	
Interface	RS-232 serial port	
Print	Internal thermal printer	
Power supply	AC 220V/110V ±10%, 50/60/Hz, 50W	
Operation conditions	15C°~32°C Humidity ≤85%	
Dimension	400mm×300mm×200mm(L×W×H)	
Net weight	11.5kg	

## • Temperature compensation refer to

Features:

Random access

simultaneously

18°C according to Westergren method

• Up to 30 samples can be scanned

• Throughput up to 60 samples /hour

- ESR curve display and print-out
- Touch screen, large LCD display
- Internal thermal printer.

## ESRA-300A, ESR Analyzer



## Features:

- Infrared optical detection technology
- Automatically scanning blood cells and location of the plasma interface from time to time with accurate
- positioning
  Automatically amending the ESR results under the detecting temperature (15°C ~ 32°C) to the ESR values at

18°C, closely - related with Westergren results

- The results are not interfered by high levels of hemoglobin, bilirubin or triglyceride
- ESR curve display and print-out
- Internal thermal printer.

Technical Specification:		
Model	ESRA-300A	
Measuring principle	Infrared sensor	
Measuring time	30 minutes	
Measuring precision	<0.2 mm	
Reproducibility	< 3%	
Temperature Precision	<0.3°C	
Sample volume	<1.6mL whole blood anticoagulant	
Reading channel	10	
Display	LCD	
Interface	RS-232 serial port	
Print	Internal thermal printer	
Operation conditions	15C°~32°C , Humidity ≤85%	
Power supply	AC 220V/110V ±10%, 50/60 Hz	
Dimension	320mm×260mm×158mm (L×W×H)	
Net weight	5.0kg	

# Hematology MEDICAL ANALYZERS



#### QC & calibration

Multple QC rules. including L–J, X–B etc. Auto and manual calbration function for both whole blood mode and pre-diluted blood mode.

Power Supply 100V-240V, 50Hz/60Hz Operation environment

Temp.: 15-30°C • Humidity: 30%-85% • Weight: 53KG • L46xW57xH61cm.

#### Integral titanium incubation system:

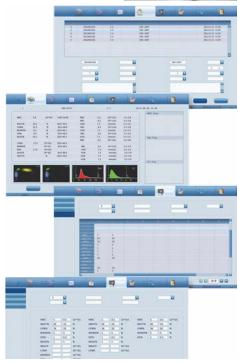
An integrated titanium incubation system is adopted to keep the reagent & the sample in the same constant temp. which facilitates the complete reaction. This is the key technology to ensure the accuracy of 5-part differentiation.

#### 2 test modes

- CBC+5Diff mode
- CBC mode

#### 2 Sample modes

- Whole blood sample mode
- Pre-diluted blood sample mode.



#### HA-83, 5-part Hematology Analyzer

#### **Technical Specifications:**

## Technology

3-D Topographic Map • Integral titanium incubation system • Laser Scatter technology • Flow Cytometry technology • Cyanide Free reagents. **Parameters** 

Regular: WBC, RBC, HGB. HCT, MCV, MCH, MCHC, RDW–SD, RDW–CV, PLT, PDW, MPV, PCT, P–LCR, NEU#, NEU%, LYM#, LYM%, MON#, MON%, EOS#, EOS%, BAS#, BAS%.

Research: ALY#, ALY%, IG#, IG%, 2 histograms, 2 scattergrams.

Test speed 60 samples/hour

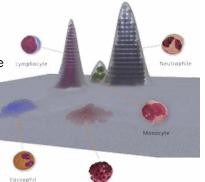
Test mode CBC+5DIFF, CBC

Performance

ITEM	Linear range	Carry over	CV
WBC	1.0-99.9X10 <sup>3</sup> /L	≤0.5%	≤2.0%
RBC	0.3-7.0X10 <sup>10</sup> /L	≤0.5%	≤1.5%
HGB	20-240g/L	≤0.5%	≤1.5%
PLT	20-999X10º/L	≤1%	≤4.0%

#### 3-D Topographic Maps for WBC:

Cytomorphologically, is a useful way of 5-part differentiation of WBC according to the size. complexity & granularity of the cells. The multiple scatter light beams are used to detect the WBC, which named as the 3-D Topographic Map technology. The forward small angle laser beam, the forward large angle laser beam & the lateral laser beam stand for the different properties of the WBC.



A. 4

## Constant Linear Sheath Flow:

A most important technology is to ensure the WBC passing the laser beam one by one. when the sheath flow passes the unique designed square counting chamber. As the diameter of the WBC will not be too different from the diameter of the transversal surface of the chamber.

the WBC are fixed in the middle or the sheath flow passing the square chamber constantly with a high speed. This Constant Linear Sheath Flow ensures the accuracy of the WBC counting.

## User-Friendly Software:

#### Data management

- 100,000 results storage including histogram and scattergram
- Multi print format including self-defined format
- Mean, CV and SD values are calculated
- Statistics including Semple, QC and Calibration
- Sort by sample number, patient name, type, time frame etc.

#### Easy maintonance

- Self-check during start up and shut down
- Tubing automatic maintenance
- Adjustable sleeping mode.

#### Multi-warning system

- Reagent iventory check
- Abnormal original data waming
- Multi warning flags.

#### System setup

- Different levels of permission
- Different reference ranges determined by age and gender

#### LIS Interface

• LIS interface with HL7 protocol.



#### QC & calibration

Multple QC rules. including L-J, X-B etc. Auto and manual calbration function for both whole blood mode and pre-diluted blood mode.

Power Supply 100V-240V, 50Hz/60Hz **Operation** environment

Sampling Mode Autoloader: 50 tubes, auto mixing, random direction tube barcode scanning technology.

Close tube STAT priority, suport both whole blood & capillary blood samples Weight 75KG

Dimensions L61xW76xH61cm.

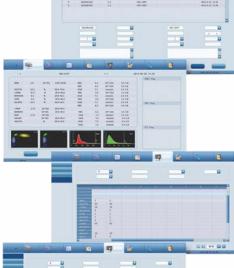
## Integral titanium incubation system:

An integrated titanium incubation system is adopted to keep the reagent & the sample in the same constant temp. which facilitates the complete reaction. This is the key technology to ensure the accuracy of 5-part differentiation.

#### 2 test modes

- CBC+5Diff mode
- CBC mode
- 2 Sample modes
- Whole blood sample mode
- Pre-diluted blood sample mode.





## HA-86, 5-part Hematology Analyzer

## **Technical Specifications:**

Technology 3-D Topographic Map • Integral titanium incubation system • Laser Scatter technology • Flow Cytometry technology • Cyanide Free reagents • Autoloader & close Tube • Randomdirection tube barcode scanning technology (optional).

#### **Parameters**

Regular: WBC, RBC, HGB. HCT, MCV, MCH, MCHC, RDW-SD, RDW-CV, PLT, PDW, MPV, PCT, P-LCR, NEU#, NEU%, LYM#, LYM%, MON#, MON%, EOS#, EOS%, BAS#, BAS%

Research: ALY#, ALY%, IG#, IG%, 2 histograms, 2 scattergrams. Test speed 60 samples/hour

Close Tube mode 60 samples/hour

Test mode CBC+5DIFF, CBC

Performance

ITEM	Linear range	Carry over	CV
WBC	1.0-99.9X10 <sup>3</sup> /L	≤0.5%	≤2.0%
RBC	0.3-7.0X10 <sup>10</sup> /L	≤0.5%	≤1.5%
HGB	20-240g/L	≤0.5%	≤1.5%
PLT	20-999X10 <sup>9</sup> /L	≤1%	≤4.0%

#### 3-D Topographic Maps for WBC:

Cytomorphologically, is a useful way of 5-part differentiation of WBC according to the size. complexity & granularity of the cells. The multiple scatter light beams are used to detect the WBC, which named as the 3-D Topographic Map technology. The forward small angle laser beam, the forward large angle laser beam & the lateral laser beam stand for the different properties of the WBC.

## **Constant Linear Sheath Flow:**

A most important technology is to ensure the WBC passing the laser beam one by one. when the sheath flow passes the unique designed square counting chamber. As the diameter of the WBC will not be too different from the diameter of the transversal surface of the

chamber. the WBC are fixed in the middle or the sheath flow passing the square chamber constantly with a high speed. This Constant Linear Sheath

Flow ensures the accuracy of the WBC counting.

## **User-Friendly Software:**

- Data management
- 100,000 results storage including histogram and scattergram
- Multi print format including self-defined format
- Mean, CV and SD values are calculated
- Statistics including Semple, QC and Calibration
- Sort by sample number, patient name, type, time frame etc.

#### Easy maintonance

- Self-check during start up and shut down
- Tubing automatic maintenance
- Adjustable sleeping mode.

## Multi-warning system

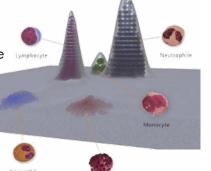
- Reagent iventory check •
- Abnormal original data warning
- Multi warning flags.

#### System setup

- Different levels of permission
- Different reference ranges determined by age and gender

#### LIS Interface

LIS interface with HL7 protocol.







## HA-8200VET, Auto Hematology Analyzer Features:

- 12 pre-determined animal settings ( dog, cat , horse, pig, cow, rabbit, goat, rat, mouse, buffalo, came l, sheep ) + 4 options
- 3-part differentiation of WBC : 19 parameters + 3 histograms
- Throughput : :::; 2 minute per samp le
- Up to 35, 000 sample results (including histograms) can be stored
- Built-in thermal recorder, optiona I external printer
- Auto reverse flushing and high pressure burn, block clearing
- Color LCD display.

Model	HA-82	200VET
Parameters	WBC Lymph# Mid# Gran# Lymph% Mid% Gran% RBC HGB HCT MCV MCH MCHC RDW-CV RDW-SD PLT MPV, PDW PCT and Histogram for WBC, RBC, PLT	
Principle	Electrical resistance for coun	ting and SFT method for HGB
Sample Volume	Prediluted I	blood: 20µL
Throughput	30 sample	s per hour
Memory	35,000	) results
Performance	Parameters: WBC(10 /L) RBC PLT MCV(fL) HGB(g/L)	Precision CV%: 2.0% 1.5% 4.0% 0.5% 1.5%
Display	Large color LCD, displays all parameters result with histogram of WBC, RBC & PLT Resolution: 800x600	
Menu	Count. Sample mode, Review. Quality control, System setting, Reference value, System service, Calibration, Copyright, Shutdown	
Alert	25 sets of alert message	
Input/Output	USB (key board, mouse, flash disk) , Rs232, parallel	
Print	Graphic thermal printer with various printing format, optional external printer	
Operating Environment	Temperature: 18–30°C Humidity: 70%	
Power Requirement	AC110-240V, 50/60Hz 2A	
Dimension (mm)	L273xW420xH415	
Weight	16Kg	

# MEDICAL ANALYZERS Elisa Microplate Readers

## UT-2100C, Microplate Reader



Model	UT-2100C	
Absorbance range	0.000-4.000Abs	
Resolution	0.001Abs (display), 0.0001Abs (calculation)	
Accuracy	$\pm 0.1\%$ or $\pm 0.005$ Abs (calculation)	
Type of microplate	Standard with 96-well or other kind of microplate & strip	
Wavelength	405, 450, 492, 630nm, 4 more filters optional (from 400-700nm available on special order)	
Optic system	8 channel optic fiber system	
Light source	Halogen lamp	
Wavelength accuracy	±1nm	
Band witch	<8nm	
Calculation method	ABS, Cut-off, single standard, curve, multi-percent, percent log, linear, exponential, power, 4PL regression	
Reading speed	5 second for 96 well plate (single wavelength)	
Shaking plate	Shaking time and speed adjustment	
Memory	More than 100 programs, up to 100,000 test results	
Interface	RS-232, USB, SD card interface	
Display	6" LCD (with touch screen function)	
Input	Touch panel or mouse	
Output	External printer (optional)	
Power supply	AC 110V-220V ±10%, 50/60Hz	
Net weight	9kg	
Dimensions (mm)	L460xW330xH200	

Features:

- Easy Windows operation system with touch screen or mouse, large LCD display.
- B-channel optical fiber system enables 5 secs' reading for the whole plate.
- Bichromatic measurement. calculation modes including ABS, Cut-off, Curve, Linear-Log and Exponential regression.
- Large memory, up to 100 test protocols and 10,000 can be stored.

• Auto self-check when power on • With lamp sleeping and wake-up function • Random positive and negative control setting • Multi-assay enables up to 12 different assays on one plate • Plate shaking function • Powerful QC function: Grubs, Westguard • Multi-rule, Levey jennings plot (optional) • Easy software upgrade by SO card, support USB mouse & keyboard • Multiform result output including patient comprehensive report • Ability to communicate with PC for data management(optional).

Model

## UT-6100, Auto Microplate Reader



#### Features:

- PC controlled system, Windows XP.
- 8-channel optical fiber system enables 5 secs' reading for 96-well plate.
- Calculation modes include ABS, Cut-Off, Curve, Linear, Log, Exponential, Power and 4PL regression.
- Up to 12 different tests can be performed in one plate.
- Powerful laboratory management software, more than 100 programs and 100,000 results can be stored.
- Powerful QC programs including Westguard Multi-rule and Instant method, automatic alarm.
- Multiform test reports output.
- Lamp saving and plate shaking.
- Save data automatically when power

Model	01-6100
Absorbance Range	0.000-4.000Abs
Resolution	0.001Abs (display), 0.0001Abs (calculation)
Accuracy	±0.5% or ±0.005Abs
Type of Microplate	Standard with 96-well or other kind of microplate & strip
Wavelength	405, 450, 492, 630nm, 4 more filters optional (from 400-700nm available on special order)
Measurement range	0.000–2.500Abs
Optic System	8-channel optic fiber system
Light Source	Halogen lamp
Wavelengths	405, 450, 492, 630nm, 4 more filters optional
Wavelength Accuracy	± 1nm
Band width	<8nm
Methodologies	End Point, fixed time, Kinetic
Calculation Method	ABS, Cut-Off, Single Standard, Curve, Multi-Percent, Percent Log, Linear, Exponential, Power, 4PL Regression
Reading Speed	5 seconds for 96 well plate (single wavelength)
Shaking Plate	Shaking time and speed adjustable
Operation	PC operation, bidirectional communications
Memory	More than 100 programs, up to 100,000 test results
Printer	All printers compatible with Windows
Interface	RS-232, USB
Power supply	AC 110V - 240V ± 10%, 50-60Hz
Net Weight	7KG
Dimensions (mm)	L454xW295xH146

UT 6100

off unexpectedly • Compatible with all popular external printers • Powerful internet connection enables remote data sharing and OS update • Multi-language software available on request.

# Elisa Microplate/Strip Reader MEDICAL ANALYZERS



#### Features:

- UV wavelength available, including 340nm.
- End Point, Fixed time, Kinetic.
- Temperature control(optional), incubation time 
   δ temp. adjustable.
- PC controlled system, windows XP.
  8-channel optical fiber system enables
- 5 secs' reading for the whole plate.
  More than 500 Programs and minimum 100,000 results can be stored.
- Powerful QC programs including Westguard Multi-rule and Instant method, automatic alarm.
- Calculation modes include ABS, cut-off, curve, linear, log. Exponential, Power and 4PL regression.
- Auto self- check when power on, with lamp saving and plate shaking.
- Random positive and negative control setting.
- Multi-assay enables up to 12 different assays on one plate.



## Features:

- A portable reader customized to your needs
- Adaptable to most test cassette and strip formats
- Supports a wide range of reagents as well as reagent development
- High-sensitivity measurement with high repeatability
- Large built-in memory can save more than 1,000 measurement records which you can check out at anytime
- Colorimetric detection: Colloidal gold, colored latex beads, carbon etc.
- Automatic line position detection and intensity calculation
- The results are highly sensitive com pared to human eye readings
- OEM service is available according to different reagent kits or fluorescence detection
- Internet, wireless internet function extendable.

## UT-6500, Microplate Reader

UT-6500		
0.000-4000 Abs		
0.001 Abs (display), 0.0001 Abs (calculated)		
340,405,450,492,630nm,3 more filters optional		
±1nm		
<8nm		
End point, fixed time, Kinetic		
ABS, cut-off, single standard, curve, multi-percent, percent log, linear, exponential, power, 4PL regression		
5 Seconds for 96 well plate (single wavelength)		
Shaking time and speed adjustable		
Ambient temperature +4~45°C, adjustable		
8-channel optic fiber system		
Halogen lamp		
PC operation, bidirectional communications		
More than 500 programs, up to 100,000 test result		
All printers compatible with windows		
RS-232		
AC 110V/240V ±10%, 50/60 ±1Hz		
9 kg		
L186xW440xH220		

Standard Filters: 405nm, 450nm, 492nm, 630nm.

**Special Filters:** 412nm, 420nm, 490nm, 505nm, 540nm, 550nm, 545nm, 546nm, 578nm, 595nm, 590nm, 570nm, 690nm, 650nm, 655nm, 600nm, 690nm, 530nm, 562nm, 620nm, 675nm, 685nm, 660nm.

## UT-200, Test Strip Reader

UT-200 portable Test Strip Reader is a compact design and extremely small reader. The reader is your solution for customized colorimetric tests. It can make rapid, high sensitivity—in qualitative, semi-quantitative, fully quantitative measurements for immunochromatographic reagent kits. UT-200 Portable Test Strip Reader is capable of reading up to 5 lines evaluating the Lateral Flow Colloidal Gold test cassettes and strips. The data can be saved using USB port or can be printed by the reader.

## Small footprint and easy to use:

The UT-200 reader is a compact designed hand held device. With the UT-200 you are faced with a professional small instrument for rapid and automated analysis. It's ideal for meeting the needs for reliable in-the-field drug of abuse and point-of-care testing.

#### Applications:

Customs Inspection • Environment Monitoring • Food Safty.

Model	UT-200
Display	Monochrome graphical LCD display
Test Strip dimensions	Width: 3~5mm, length<75mm
Test cassette dimen.	70x20x5mm (L x W x H)
Wavelength	525±30nm (Can Custom-make)
Colorimetric detection	Colloidal gold, colored latex beads, carbon etc.
Number of test	1
Number of test lines per strip	Up to 5 test/control lines per strip
Measurement time	<15 seconds for one test strip
Stability	Relative drift value $\leq$ 3% within 2 hours
Printer	Micro-Thermo printer
Save type	Built-in SD card (2 GB)
Connections	2 x USB port
Operating conditions	15~40°C, humidity: ≤80%
Input power	AC 100-240V 50/60Hz, DC 12V 2A

# MEDICAL ANALYZERS Elisa Test Strip Reader



#### **Used for:**

For all kinds of gold immunochromatography reagent kits, qualitative, semi-quantitative, fully quantitative measurements for immunochromatographic reagent kits.

#### **Applications:**

- Drugs of Abuse Tests
- Fertility Tests
- Infectious Disease and Health Tests
- Animal Disease & Drug Residual, etc.

#### UT-100, Test Strip Reader

UT-100 Test Strip Reader can distinguish the differences of colors from various biochemical reactions and analyze the reactants to provide quantitative clinical diagnosis. The diagnostic analysis can be applied for drugs of abuse, fertility, and disease test etc.. It can also be applied to test disease or distinguish drug residual in animals. To summarize, these readers provide a detection platform for rapid test applications.

• Further to the test proceeding, the operator places the test cassette or the test strip into the reader's cassette holder and depending on the selected reading mode, the evaluation process will be automatically initiated, the final results will be printed out by the internal printer.

• We offer an OEM business-to-business solution based on the reader for different test strip manufacturers.

• The reader is capable of reading up to 5 lines evaluating the Lateral Flow Colloidal Gold test cassettes and strips.

#### Features:

- 6.2 inch touch screen and smart operation system
- High-sensitivity measurement with high repeatability
- Supports a wide range of reagents as well as reagent development
- Compatible with diferent reagent housing configurations
- Large built-in memory can save more than 10,000 measurement records which you can check out at anytime
- Colorimetric detection: Colloidal gold, colored latex beads, carbon etc.
- Automatic line position detection and intensity calculation
- Powerful Software functions for the manufacturer of rapid tests and for End-users
- OEM service is available according to diferent reagent kits or fluorescence detection
- Internet, wireless internet function extendable.



Model	UT-100
Display	6.2 inch touch screen
Test Strip dimensions	Width: 3~5mm, length <75mm
Test cassette dimensions	70x20x5mm (L x W x H)
Wavelength	525±30nm (Can Custom-make)
Colorimetric detection	Colloidal gold, colored latex beads, carbon etc.
Number of test	1
Number of test lines per strip	Up to 5 test/control lines per strip
Measurement time	<15 seconds for one test strip
Stability	Relative drift value $\leq$ 3% within 2 hours
Printer	Micro-Thermo printer
Save type	Built-in SD card (2 GB)
Connections	2 x USB port
Operating conditions	15~40°C, humidity: ≤80%
Dimensions (D x W x H)	320x196x156mm
Input power	AC 100-240V 50/60Hz, DC 12V 4A
Weight	3.4Kg

# Elisa Plate Sealer MEDICAL ANALYZERS



## **Controls:**

types of plates and sealing materials. Sealing time and temperature can be set by using the control knob, OLED display screen, high light and no visual angle limit.

- Sealing time (0.1sec increment) and temperature (1.0°C increment)
- Sealing pressure can be adjustable as the sealed plate results
- Automatic counting function.

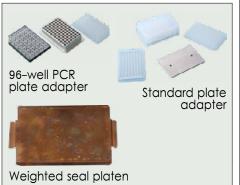
#### Security:

- The drawer is controlled by MCU, if a hand or objects stuck in the drawer when it's moving, the drawer motor will automatically reverse. This feature prevents injury to the user and the unit
- Special & smart design on the drawer, it can be detached from the main device. So the user can maintain & clean easily the heating element.

#### **Energy Saving Functions:**

- When the UT-1001 is left idle more than 60mins, it will automatically switch into stand-by mode during which the temperature of the heating element is reduced to 60°C to save energy.
- When the UT-1001 is left idle more than sealing flake if the film is curly 120mins, it will switch off automatically for safe. It will switch off the display and the heating element. then, the user can awaken the machine by pushing any button.

#### Accessories:



#### UT-1001, Semi Automated Plate Sealer

UT-1001 Plate Sealer is a semi-automatic thermal sealer which is ideal for the low to medium throughput laboratory that requires uniform and consistent sealing of micro-plates. Unlike manual plate sealer, the UT-1001 produces repeatable plate seals. With variable temperature and time settings, sealing conditions are easily optimised to guarantee consistent result, eliminating sample loss. The UT-1001 can be applied in product's quality control of many manufacture enterprise such as plastic film, food, medical, inspection institute, scholastic scientific research and teaching experiment. Offering complete versatility, the UT-1001 will accept a full range of plates for PCR, assay or storage applications.

#### **Highlights:**

- Format different micro well plates δ heat seals
- Adjustable Sealing Temperature: 80 200°C OLED display screen, high light and no visual angle limit
- The UT-1001 allows optimal settings for all Precise temperature, timing and pressure for consistent sealing
  - Automatic counting function
  - Plate adapters allow use of virtually any ANSI microplate or PCR plate
  - Motorized drawer and motorized sealing platen guarantee consistent good results
  - Compact footprint: only W178mm x D370mm
  - Power requirments: AC120V or AC220V.

#### Easy to use:

Easy to use, only simple 5-step operations





Step.3-2 Put the weighted



Step.1 Pull the drawer Step.2 Put the adapter, plate Step.3-1 Put a sealing film

#### Remark:

When using the weighted sealing flake, the recommended sealing times should be increased by 1 second!

Model	UT-1001
Display	OLED
Sealing Temperature	80 – 200°C (increment of 1.0°C)
Temp. accuracy	±1.0°C
Temp. uniformity	±1.0°C
Sealing time	0.5s ~ 10s, increased by 0.1 sec.
Input power	300W
Dimension(D×W×H)	370mm×178mm×330mm
Weight	9.6kg
Seals plate heights	9 to 48mm high
Compatible Plate Materials	PP (Polypropylene), PS (Polystyrene) PE (Polyethylene)
Compatible Plate Types	SBS Standard plates, Deep-well plates PCR plates (Skirted, semi-skirted & no-skirted formats)
Heating Sealing Films ଌ Foils	Foil-polyproylene laminate, Clear polyester- polypropylene laminate, Clear polymer, Thin clear polymer

Step.4 Press "RUN" key



#### Features:

- Fully automatic.
- Easy Windows operation system, large LCD display.
- Washes flat, U and V-bottom strips and plates.
- 12-way or 8-way manifold, automatic and manual positioning.
- Large memory, up to 50 wash protocols can be programmed.
- Automatic monitoring for vacuum and pressure, automatic rinse cycle.
- Washing pressure volume and time adjustable.
- Liquid level detection & alert function
- No special airtight bottle required for wash bottle.
- Easy maintenance.



#### Features:

- Fully automatic.
- User friendly operation system with large LCD display.
- Washes flat, U and V-bottom strips and plate.
- 12-way or 8-way manifold, automatic and manual positioning.
- Large memory, up to 100 wash protocols can be programmed.
- Multi-channel, 1or 3 (optional) for wash, 1 for rinse and 1 for waste.
- Plate shaking function, time and speed are adjustable.
- Two 96-well plate incubation positions (optional)
- Liquid level detection & alert function.
- Easy maintenance.

## UT-2600C, Microplate Washer

Model	UT-2600C
Plate Mode	96-/48-well plate or strip
<b>Dispense Precision</b>	CV<2.0%
Residual Volume	<1µl
Washing Volume	50~3000µL for 8-way manifold 50~2000µLfor 12-way manifold
Washing Cycle	Maximum 99 cycles
Strip Washing	1 to 12 strips programmable
Soaking Time	0~24hours
Shaking Time	0~24hours
Display	5″ LCD
Wash Channels	3 channel bottles, 1 for wash, 1 for water(rinse) and 1 for waste
Bottles Capacity	2 Liters each bottle
Memory	50 washing protocols
Interface	RS-232
Power Supply	AC 110/220V±10%, 50~60HZ
Net Weight	8KG
Dimension (mm)	L390xW340xH180

## UT-3100-5, Microplate Washer, 5 Channels, Build-In Incubator

Model	UT-3100-5
Plate Mode	96-/48-well plate or strip
Residual Volume	<1µl
Washing Volume	10~3000µl/well, 1µl by step
Washing Cycle	Maximum 99 cycles
Strip Washing	1 to 12 strips programmable
Soaking Time	0~24hours
Shaking Time	0~24hours
Display	Large LCD
Wash Channels	5 channel bottles, 1 or 3 (optional) for wash, 1 for water(rinse) and 1 for waste
Bottles Capacity	2 Liters each bottle
Memory	100 washing protocols
Interface	RS-232
Power Supply	AC 110/220V±10%, 50~60HZ
Net Weight	13 KG
Dimension (mm)	L450xW390xH190

# Elisa Microplate Washers MEDICAL ANALYZERS



#### Features:

- 96-way manifold, automatic and manual positioning.
- Multi-channel, 3 for wash, 1 for rinse and 1 for waste.
- Plate shaking function, time and speed are adjustable.
- User friendly operation system with large LCD display.
- Washes flat, U and V-bottom strips and plate.
- Large memory, up to 100 wash protocols can be programmed.
- Liquid level detection & alert function.
- Easy maintenance.

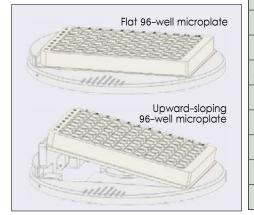
Model	UT-3900
Plate mode	96-well plate or strip
Residual volume	<1µl
Washing volume	50~3000µl/well, 10/50 continuously adjustable
Washing cycle	Up to 99 cycles
Strip washing	Wash 2 plate at a time, 1-8 strips programmable
Soaking time	0~24 hours
Shaking time	0~24hours
Display	Large LCD
Wash channels	5 Channels, 3 for wash, 1 for rinse and 1 for waste
Memory	100 washing protocols & 10 plates protocols
Interface	RS-232
Power requirements	AC 110/220V±10%, 50±1 Hz
Net weight	23.8Kg
Dimension LxWxH (mm)	610x460x240

## ELI-WAS-200, Semi-automatic Microplate Washer (ELISA Washer)



#### **Applications:**

- ELISA washing procedure.
- 96-well microplate washing and dispensing.



#### Features:

- Economical ELI-WAS-200 is very ideal for washing immunoassays in 8-well and 96-well microplate for ELISA procedure; economic price is especially suitable for laboratories with limited budget.
- **Convenient operation** Unique ergonomic platform can accommodate 8-channel dispenser and accept flexible placement of 96-well microplate in flat or upward-sloping way that can reduce residues more efficient.
- No cross contamination There are 2 separate rows of tiny S.S. tubes in different length on 8-channel dispenser. The shorter row is used to distribute washing solution and the longer row is used to suck waste ilquid. The 2-row design can avoid cross contamination.
- Autoclavable The main body of 8-channel dispenser is made of PTFE and its 2-row of tubes are made of SUS 304.

Both have a long working life and are autoclavable.

## Ordering Information

196200-11(22)
ELI-WAS-200, Semi-automatic Microplate Washer AC11011, 60Hz (AC220V, 50Hz).
196811-00 8-channel Dispenser.
196100-04 Waste Bottle (2L).
196100-06 Buffer Bottle (2L).

Model	ELI-WAS-200
Max. flow	500 ml/min, adjustable
Buffer bottle capacity	2 Liter
Waste bottle capacity	2 Liter
8-channel dispenser dimension	137(L)x67(W)x33(H) (mm)
8-channel dispenser material	PTFE
Dispensing tube material	SUS 304
Machine dimension	200(L)x240(W)x130(H) (mm)
Packing dimension	350(L)x310(W)x370(H) (mm)
N.W./G.W.	4.10 / 5kg



#### Installation diagram

10 teed the 8-channel dispenser enough gravity to dispense, buffer bottle must be placed 60 cm above plate base. \*Waste Bottle (2L) and Buffer Bottle (4L) are optional.





#### **Applications:**

- ELISA washing procedure.
- 96-Well microplate washing and dispensing.



#### Software:

UT-6550 keeps with high visual and logical user interface of software, it can be offered a comprehensive inbuilt calculations, such as blank subtraction, quantitative curve fit, quanlitative classification and kinetic calculations, as well as the versatile reporting tool and make data reduction.

#### Features:

- Easy of use with 7 inch touch screen together with 3 external keys
- A broad wavelength range of 340–750nm
- Able to use individually or connect with PC and export results or a PAD with Android system
- Absorbance range: 0.0~4.000Abs
- 8 positions optical filter wheel, equipped with 4 standard optical filters
- Fast and accurate measurement of 96-well plates within 6 seconds
- Convenient built-in shaker
- Wide-format internal thermal graphical printer
  Wide applicability for life science and clinical laboratories.

## MIC-WAS-100, Gravity-fed Microplate Washer

## Features:Economical

MIC-WAS-100is a manual dispenser by utilizing the force of gravity, ideal for washing immunoassays in 96-well microplate for ELISA procedure or similar applications.

## Convenient operation

Unique designed plate base can accept flexible placement of 96-well microplate in flat or upward-sloping way that can reduce residues more efficient.

#### No cross contamination

There are 2 separate rows of tiny S.S. tubes in different length on 8-channel dispenser. The shorter row is used to distribute washing solution and the longer row is used to suck waste liquid. The 2-row design can avoid cross contamination.

#### Autoclavable

The main body of 8-channel dispenser is made of PTFE and its 2-row of tubes are made of SUS 304.

Both have a long working life and are autoclavable.

## **Ordering Information**

## 196100-01

MIC-WAS-100, gravity-fed microplate washer, complete set includes 9-channel dispenser and plate base: 196811-00 8-channel Disper

**196811-00** 8-channel Dispenser. **196100-05** Waste Bottle (4L). **196100-06** Buffer Bottle (2L). **196100-02** Microplate plate.

Model	MIC-WAS-100
Min. height	Buffer bottle must be placed 60 cm above plate base.
8-channel dispenser dim. (mm)	137(0 × 67(W) × 33(H)
8-channel dispenser material	PTFE
Port thread	3/16 inch (5 mm)
Plate base dimension (mm)	197(Li x 148(W) x 433(H)
Plate base material	Acrylic
Dispensing tube material	51/5304

## UT-6550, Microplate Reader and Washer

UT-6550 Microplate Reader is a reliable and robust instrument for a wide variety of research and clinical applications. It reads various kinds of 96-wells plates, and is equipped with shaking function. It can be used as a stand alone instrument or under PC control with regular or APP software. It is easy-to-use the software.

#### **Filters:**

The UT-6550 Microplate Reader comes with four standard absorbance filters: 405, 450, 492, and 630nm. We also supply custom filters at 5~9nm intervals from 340 to 750nm on request.

Model	UT-6550
Display	7 inch touch screen (800x480 dots)
Light source	Quartz-halogen lamp 6V/10W
Wavelength	340–750nm
Half-bandwidth of filters	3~9nm
Read-out range	0~4.000Abs
Linearity (405nm)	0~2.000Abs ≤±1% 2~4.000Abs ≤±2%
Resolution	0.001Abs
Accuracy (405nm)	±1% (0-3Abs) ±2% (3-4Abs)
Precision(405nm)	CV≤0.2% (0−3Abs) CV≤1.0% (3−4 Abs)
Test speed	<6s for 96 wells plate
Incubator	No
Shaking	3 modes shaking: slow, medium and fast
User interface	Integrated software or PC control software
Operation	Touch screen, 3 pcs external keys
Storage	200 programs and 100,000 test records
Ports	3 USB ports, for PC, printer and USB-disk
Dimensions (W x D x H)	440 x 295 x 225 mm
Weight	10 kg