# Specifications

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System	Category	Random access, fully automatic chemistry analyer
,	Throughput	240 tests/hour(without ISE),315 tests/hour(with ISE)
Function	Methodology	End point, Fixed Time, Kinetic
	Reagent	Open system
	Reagent Position	40
	Sample Position	40
	Minimum Reaction Volume	150uL
	Carryover	<0.005%
	Water Consumption	Low to 5L/Hour
	Maximum Reaction Time	19.1 minutes (Single reagent), 15.7 minutes(Dual reagent)
	Maximum Reaction Volume	500 uL
	Principle	Colorimetry, Turbidimetry
	Testing Mode	Regular mode(single&dual reagents), fast mode(single reagent)
	Sample Mode	Random access, STAT sample priority
Sample	Sample Volume	2~50uL, step by 0.1 uL
Reagent Probe &Mixer	Sample Disk	40 positions
	Sample/reagent Probe	One probe for sample and reagent with liquid level detection, vertical and horizontal collision protection and reagent volume real time monitoring function
	Sample Tube	Regular sample tube (13 x 100mm, 13x75 mm, 12x100 mm, 12x75 mm), Vacuum tube, eppendorf tube, plastic tube, etc.
	Reagent Volume	R1:150-450 uL, R2:10-300uL, step by 1uL
	Reagent Disk	40 reagent positions, 24 hours water cooling, 4-12°C
	Reagent Bottles	Compatible with Olympus and Hitachi reagent bottles
	Mixer	High polished nano material mixer
Reaction	Reaction Cuvettes	81 cuvettes, semi-permanent rigid UV special plastic cuvettes
System	Wash Station	6-step auto wash station
3 y 3 1 C 1 1 1	Reaction Temperature	37±0.1℃
	Heater	Metal thermostat for reaction disk
Optical	Lamp	Halogen Tungsten lamp, 12V20W, about 2000hours, water cooling system
System	Filter	FMSS(Full-sealed Matrix Spectrometric System)
System	Wavelength	8 wavelengths: 340,405,450,510,546,578,630,670nm
	Resolution	0.0001Abs
	Linearity Range	0-3.5Abs
	Accuracy	0.5A: < ± 0.02AbS, 1.0A: < ± 0.04Abs
	Stray Light	>4.5
	Stability	<0.01Abs/hour
	CV	<1.5%
	Half Band Accuracy	≤±2nm
C = 10 C C	Detector	Photodiode detector array
Cal&QC	Calibration Mode	One point linear, two point linear, multi-point linear, Logit-4P, Logit-5P, spline, exponential, polynomial
	Calibration Curve	Calibration curve auto check, auto curve fitting
	QC Rule	Westgard multi-rule. Cumulative sum check, Twin Plot
	QC Curve QC Warning	Westgard multi-rule, Cumulative sum check, Twin Plot
Software	Operating System	Out of control auto warning, data automatic record and analysis Windows 7/10
sonware	Data Storage	Decided by computer hard disc capacity
	LIS Interface	Bi-LIS interface
	Print Mode	Multi default formats, user-defined formats
	System Monitor	Real time monitoring for sample disk, reagent disk, reaction disk. Real time monitoring for QC status.
	-,	Real time monitoring for reaction cuvettes status, lamp status and temperature. Real time monitoring for reagent volume, reaction curve, calibration curve and QC curve. Linearity range limitation, substrate exhaustion judgement and prozone detecting. Abnormal status warning.
	Other Function	User authority setting, test panel function, calculated/manual parameters programing, carryover setting, sample and reagent blank auto calculation, automatic failure recovery, automatic print, data statistic, auto/manual dilution test, auto retest.
	PC Configration	CPU 2.5GHz, memory 4GB, hard disc 500G 19 inch widescreen monitor
	PC Interface	RS-232C
Others	Dimension	855(L)x 550(D) x 580(H)
	Power Supply	AC 100-240V, 50/60Hz ± 1 Hz, ≤350VA
	Net Weight	75Kg
	Optional Parts	Barcode reader, ISE module, Water purification module, PC with touch screen, HP laser printer

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Logo change announcement Nothing has changed except our logo. Please take a note of it. Thank you.

Old logo HETO: now HETO. The old logo will be continued to be used upon requests

# **AU240**

Auto Chemistry Analyzer

Precise, Fast and Stable



#### **User Friendly Software**

- Easy operate with iconic interface
- Multi-language available
- Easy reagent parameters setting
- Support batch request, panel/calculation test
- Print out report template editable
- Auto troubleshoot failure and recovery
- Powerful statistic system
- Manual dilution, auto dilution and post dilution
- Easy rerun and restore test

#### Calibration & QC

- Multiple calibration mode
- Advanced algorithm to obtain best calibration curve
- Multi QC rules: Westgard, Cumulative sum check, Twin plot



#### **Real Time Monitoring**

- Reaction curve, calibration test and QC test curve
- Sample, reagent and reaction cuvette status
- Lamp intensity, water tank and waste tank status
- Reaction disk and reagent disk temperature





#### Reaction System-

- 81 high light transmittance reaction cuvettes
- Metal thermostat ensures stable temperature: 37°C
- Auto water blank test ensures precise results
- Optional quartz glass cuvette

## Sample & Reagent Disk-

- 24 hours reagent refrigerator: 4-12°C
- Noise free water cooling design
- 40 positions for reagent
- 40 positions for sample with STAT priority
- Optional barcode scanner available

## Sampling System-

- High polished nano material sample/reagent probe
- High accuracy ceramic syringe
- Auto depth adjustment
- Liquid level detection, vertical and horizontal collision protection
- Maintenance free rotor with stable movement

# ■ Anti-contamination Design-

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





#### Optional

- Internal PC with touch screen
- ISE Module:
  K<sup>+</sup>, Na<sup>+</sup>, Cl
- Barcode Reader

#### Fluid System

- Branded components including:
   IWAKI pump, SMC valve, Ceramic syringe,
   THOMAS peristaltic pump, Tygon tubing and
   CPC tubing couplings
- Built-in degasser ensures precise sampling



- Halogen tungsten lamp with about 2000H life time
- Full-sealed matrix spectrometric system
- Simultaneously dual wavelength detection to avoid interference
- Silent water cooling design

**Optical System** 



