

Technical specifications

Throughput	150T/hr (Constant with both mono & double reagent)
System Function	RANDOM ACCESS/STAT/Batch
Test methods	End point, Fix time, Kinetic, (Single / Double reagent chemistry, Mono/ Bi- chromatic measurements)
Calculation methods	1 Point linear, 2 Point linear, Exponential, Logit log 3P, Logit log 4P, Logit log 5P, Spline, Line Graph, K factor
Blank	Reagent blank, sample blank, Pre Sample blank, Pre Reagent blank
Sample tray	40 positions, Sample volume 2-30 µl, 0.1 µl increment, Micro Cup & Test tube can be used for sample
Reagent tray	80 positions, Reagent volume: 20-300µl, 1µl increment
Reaction tray	44 Cuvettes: Single, Reusable, made of High quality Acid/ Alkaline resistant UV material Reaction volume 150-330 µl
Mixing system	Teflon Coated Mixer
Sample probe	1 needle with liquid level detector, shock sensor
Optics	Halogen-Tungsten lamp, Absorbance range: 0-4.0 Abs. Resolution : 0.0001 Abs. Diffraction Photometry with Wavelengths: 340, 405, 450, 505, 546, 578, 630, 700nm & 4 more options
Wash station	12 step washing, 4 Needles wash station, 1-dry pad, External & Internal Needle Cleaning
Calibration	Linear & Non Linear
QC	Multi level QC setup with levey-jennings graph and westgards multi rules with MEAN, SD and CV
Water consumption	6L/hr
Temperature	Reagent: 2-14°C (24hrs refrigeration), Reaction cuvette: 37°C ± 0.1°C Instrument storage: 5-40°C, Operating:10-30°C
Humidity	≤ 80%
System Interface	USB
Power requirement	AC 220V ± 10%, 50/60 Hz
Gross weight	80 kg.
Dimensions	750mm(L) 560 mm(W)530mm (H)

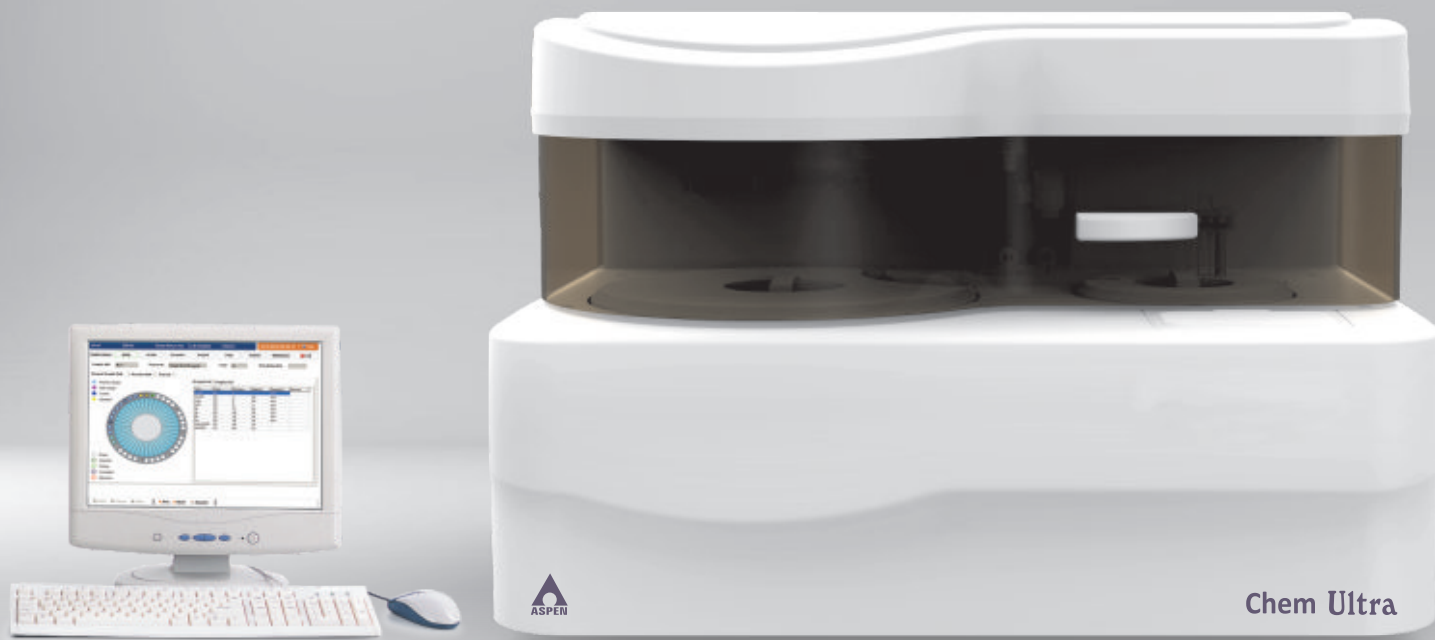


- INNOVATIVE DESIGN
- SMART TECHNOLOGY
- RANDOM ACCESS



# Fully Automated Chemistry Analyzer

## Chem Ultra



### Sampling Alarm

- External and internal mirror polish probe
- Needle stroke Sensor
- Capacitive level detector
- Auto probe depth adjusting
- Inventory monitoring
- Inner and outer probe washing

### Dedicated mixer

- Teflon coated mixer to reducing carry over
- No water dripping

### High precision ceramic syringe

- Sample dispensing by frequency converting design
- Long lasting ceramic piston
- Accurate dispensing as low as 0.1 $\mu$ l

### Multi Functional Reagent/ Sample Tray

- Non stop refrigerated compartment (2-14 $^{\circ}$ C)
- Removable Tray
- 80 Reagent Positions
- 40 Sample positions
- Sample/ Reagent barcode reader (Optional)

### Optimized washing station

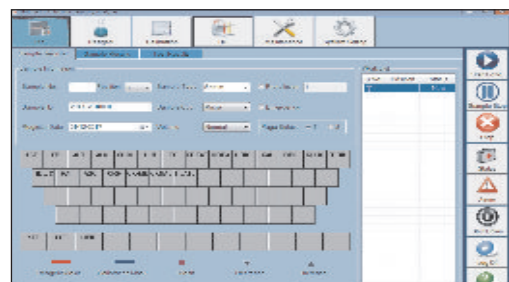
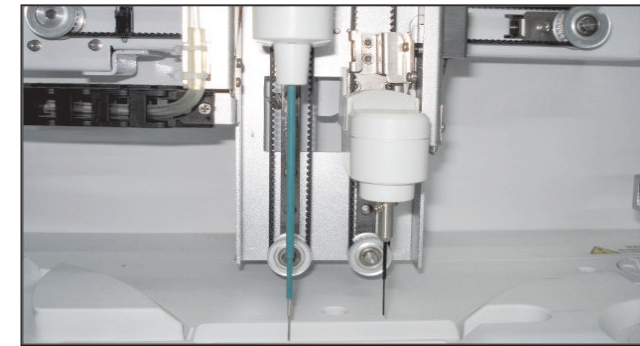
- 4 needle washing station
- 12 step washing
- Effective washing to ensure low carry over
- Washing with detergent and de-ionized water

### Reaction System

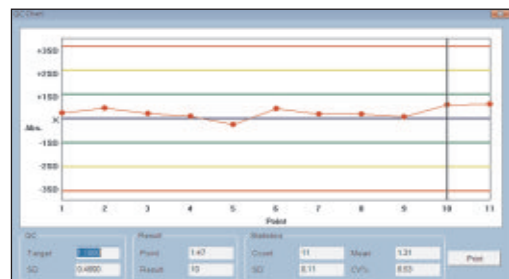
- 44 reusable cuvettes
- Reaction volume as low as 150 $\mu$ l
- Reaction temperature 37 $^{\circ}$ C  $\pm$  0.1 $^{\circ}$ C

### Optical System

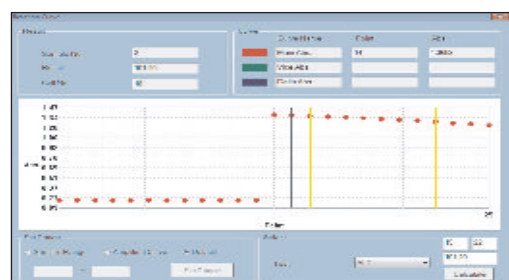
- Diffraction photometer- multi wavelength
- Halogen - tungsten lamp
- Light path 6mm



- User friendly software interface
- Simple and easy-to-use
- Auto dilution of samples and calibrators
- Masking tests when reagent or calibrator is exhausted



- Linear & Non Linear calibration
- Multi-point calibration, up to 8 points
- Quality control rules apply to Westgard multi-rule, L-J plot, Cumulative



- On line graph
- Real time updating of reagent volume
- Auto checking and warning of reaction status
- Running status of reagent tray, Sample tray and reaction tray
- Alarm log" Automatic alarm and record in alarm list with explanations during running process