

# UNICORN 480

## Fully Automatic Clinical Chemistry Analyzer

### Technical Specifications

#### General Information

Machine type	Random access, open reagent & Barcoded reagent (Optional)
Test Speed	Constant 400 tests/Hour (Single and double Reagent)
Test Principle	Colorimetric Method, Turbimetry
Test Method	1 Point End, 2 Point End, Fixed Time, Kinetics
Calibration	Linear and Non Linear

#### Sample Unit

Sample Tray	120 Sample Positions
Sample Tube	Micro Cup, Test Tube, Blood Collection Tube can be used. ( $\Phi$ 12 - 13) mm * (25 - 100) mm
Sample Volume	2-30 $\mu$ l, step by 0.1 $\mu$ l
Sample Probe	Liquid Level Detection, Collision Protection
Sample Barcode	Optional

#### Reagent Unit

Reagent Tray	90 Reagent Positions, Non-Stop Reagent Cooling System at 2 - 14 °C. Optional Open and Reagent Barcode system.,
Reagent Volume	20 - 300 $\mu$ l, Step by 0.1 $\mu$ l
Reagent Probe	Liquid Level Detection, Collision Protection

#### Reaction Unit

Reaction Tray	90 Reaction Cuvettes, Reusable amorphous cuvettes, Accurate Transmittance, Stable Reaction Temperature of 37 °C.
Reaction Volume	150 - 330 $\mu$ l
Reaction Time	10 Minutes

#### Mixing Unit

Mixer	Paddle type mixing, Effectively prevents carry over
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#### Optical System

Light Source	Halogen Lamp
Wavelength	340 nm, 405 nm, 450 nm, 505 nm, 546 nm, 578 nm, 630 nm, 700 nm (4 additional filters available).
Absorbance Range	0 - 4 Abs

Resolutions	0.0001 Abs
Absorbance Accuracy	0.5+0.025, 1.0+0.07
Absorbance Stability	$\leq$ 0.01
Absorbance Repeatability	$\leq$ 1.5%

#### Operating System

Operating System	Windows XP, Windows 7, Windows 8, Windows 10
Processing Features	Automatic Calibration, Performs Test with combination, Effective and easy reagent management, Serum Index Real time process detection, Substrate Depletion for Kinetic Blank Deduction, Dirty Cuvette Detection, Customizable Report Print, Report Statistics, QC files and ranges with L-J chart, STAT Function, Available with Ready to use system packs, QC Fail Auto warning, Pre and Post Dilution with volume Adjustment, Sample Monitoring, Lamp Monitoring, Reaction Cuvettes Monitoring, Temperature Indicator, Inbuilt Reservoir.

#### Interface

Report Printing	Pattern TCP/IP network interface
	6 Formats available, Support Customized format

#### Working Conditions

Dimension	1100 mm(L) X 765 mm(W) x 1150 mm(H)
Power Supply	AC 230 V, 50 Hz, 1000VA The Distance between the power socket and the instrument Should be less than 2.5 meters.
Earthing	$<$ 5 V
UPS	Online 2 KVA UPS with Isolated transformer
Water Consumption	15 L/Hour (Maximum) Inbuilt reservoir available for emergency.

Net Weight	200 kgs
Sound Level	$\leq$ 40 db

\*Product specifications are subject to change without prior notice.



"Think Biochemistry ! Think Vector..."



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TOLL FREE  
1800-270-1027

[www.vectorbiotekindia.com](http://www.vectorbiotekindia.com)

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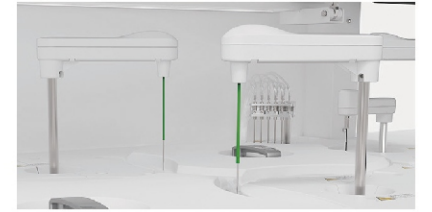
## Fully Automatic Clinical Chemistry Analyzer

- Constant 400 Tests/Hour with Single or Double Reagent.
- 90 Reagent Positions, Ready to use system packs available.
- Automatic liquid level sensing, anti-collision protection.
- Integrated full closed optical system, multi wavelength simultaneous detection.
- New Amorphous optical plastics reaction cups, perfect transmittance.
- Maintenance free semiconductor based solid state refrigeration.
- Friendly Surface and Easy to use Operation.



### Smart Sampling Probe

- Mirror polished Probe, External and Internal washing system.
- Liquid level detection sensor, Accurate detection of Sample volume With sample clot detection.
- Collision protection and Auto adjustment of Probe.



### Separate Probes for Reagents

- Probes are Mirror polished as well as separate reagent probes Minimize the Carry Over.



### Independent Mixing Bar

- Excellent coating reducing carryover and Standard steps for homogeneous mixing.



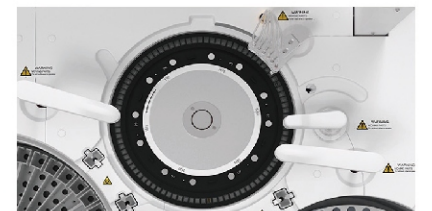
### High Precision Ceramic Piston

- Accurate dispensing with step of 0.1 µl.
- Durable and quality ceramic piston ensures precise dispensing.



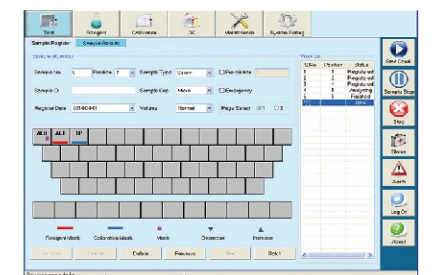
### Userfriendly Reagent and Sample Tray

- 90 Reagent Position for R1 and R2 and 120 sample positions with accommodation of micro cup and test tubes.
- Reagent Tray Provides 24 Hours non stop refrigeration.
- Optional barcode System for sample.



### Advanced Photometry and Reaction Tray

- 90 Reaction reusable Cuvettes with 2x6 Steps Auto washing system.
- Integrated and Fully closed optical system.
- Stable temperature of Reaction Tray of  $37 \pm 1^\circ\text{C}$ .



### Powerful Operating Software

- Easy and Iconic menu
- Auto Dilution Facility
- STAT Facility
- Real Time Inventory Management
- Real Time Reaction Curve
- Making of Profile panel
- Real Time Inventory Management
- Warning alarm and log book
- QC L-J charts and calibration charts
- Customizable report prints, LAN H17 facility
- System pack Barcoding Facility
- Dilution on Substrate Depletion for Kinetic Chemistries

