

# VEC-200<sup>+</sup>

## Random Access Clinical Chemistry Analyzer



With System Packs



- Fully Automatic, Discrete, Random Access Clinical Chemistry Analyzer With STAT Sample Priority.
- Compact Custom Design With 6 Stop 11 Steps On Board Laundry Mechanism.
- Throughput: 240 Photometric Test/hr. (315 Test /hr With ISE).
- 81 - Special Plastic Cuvettes & Optional Quartz Cuvettes.
- Full - Sealed Matrix Spectrometric System (FMSS).
- Onboard - Refrigeration Of Reagent & Sample Compartment.
- Available With Ready To Use System Packs

TOLL FREE  
1800-270-1027



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

## Reaction System & Laundry Mechanism

- 81 UV light transmittance reaction cuvettes.
- Automated onboard 6 stop 11 Steps laundry wash of cuvette with detergent to ensure precise wash of cuvette.
- Metal thermostat incubator to ensure stable temperature.
- Auto water blank test to ensure individual cuvette status.
- Optional quartz glass cuvettes.



## Reagent & Sample Disk

- Onboard refrigerated (4 - 12° C) of reagent compartment to ensure reagent on board stability.
- Noise free coolant based cooling design of reagent and sample compartment.
- 40 reagent positions (30 ml & 15ml).
- 40 sample positions with STAT priority compatible with test tube, vacutainer, sample cup, nano tube etc.



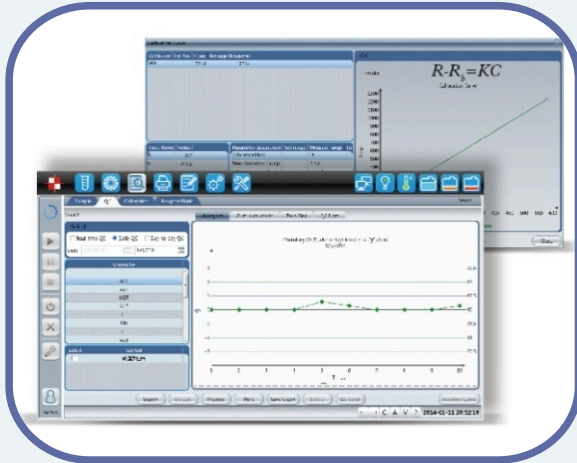
## Sample & Reagent Mechanism

- High polished nano material sample/reagent probe to reduce contamination.
- Automated high pressure internal & external jet washes of probe and mixer.
- Liquid level detection, vertical and horizontal collision protection.
- High accuracy ceramic syringe with step of 0.1 µl to ensure sample & reagent precision.
- Maintenance free rotor with stable movement.
- High polished nano material mixer to reduce contamination.
- Intelligent anti-contamination program.



## Optical & Fluidic System

- Halogen Tungsten Lamp more than 2000 hrs life.
- Full sealed matrix spectrometric system to ensure the enhance life of optical system.
- Simultaneously dual wave length reading to avoid interference.
- Silent noise free coolant based cooling design to reduce heat of lamp & enhance the lamp life.
- Built- in degasser to ensure precise sampling.
- Branded components including IWAKI Pump, SMC valve, IDEX ceramic syringe, THOMAS peristaltic pump, Tygon tubing & CPC tubing coupling.

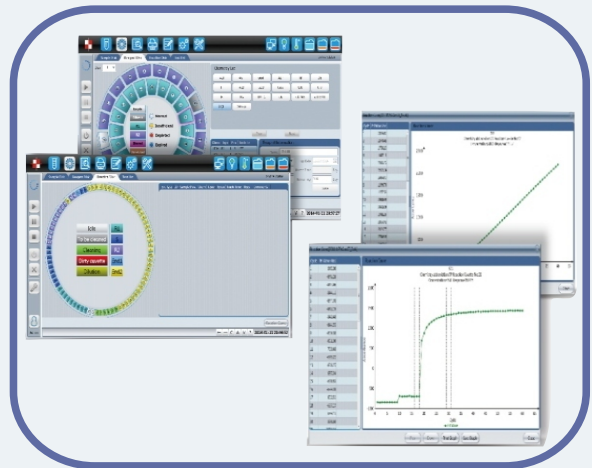


## Calibration and QC Function

- Multiple calibration modes.
- Linear non linear calibration with flexible calibration method.
- 9 different types of calibration methods.
- 6 different level of calibrators can be **programmed**
- A real time daily QC function to ensure the system is working at best analysis conditions.
- Westgard Multi QC program can define at different level of controls.
- QC plot: Westgard multirule, Cumulative sum check, Twin plot.

## Real Time Monitoring

- Real time monitoring of reaction curve of test, calibration and QC.
- Sample, reagent and reaction cuvettes status.
- Lamp intensity, distilled water tank and waste tank status.
- Reaction disk and temperature status etc.



## VECSYS

- A complete range of biochemistry system packs.
- Highly economical and affordable with superior quality.
- Highly stable ready to use reagents with long shelf life.
- Very Accurate, Precise and Convenient.

(ALP, Albumin, Amylase, ADA, Bilirubin, Cholesterol, Creatinine, Creatinine Enz., Calcium, CK-MB, CK-Nac, Glucose, GGT, HbA1c, HDL-C, LDL-C, Lipase, LDH, Phosphorus, SGPT, SGOT, Triglycerides, Total Proteine, Urea-UV, Uric acid)

# TECHNICAL SPECIFICATIONS

Fully automatic, Discrete, Random Access Clinical Chemistry Analyzer with STAT sample priority.

## SYSTEM FUNCTION

Throughput: 240 tests /hour, 315 tests with ISE (Optional)

Measuring Principle: Absorbance, Photometry and Turbidimetry.

Methodology : End Point, Initial Rate, Kinetic with single/Dual Reagent Chemistry

Programming : Open system user defined chemistry, Profile and calculation chemistry

Reagent positions : 40 reagent positions

Sample Positions : 40 Sample Positions.

Test Mode : Regular mode single, double reag. / Fast Mode Single reag.

## SAMPLE/REAGENT SYSTEM

Sample volume : 2 – 50 µl steps by 0.1 µl

Reagent volume : R1 150 – 450 µl, R2 10 – 300 step by 1 µl

Probe Cleaning : Internal and external with high pressure jet wash

Carry over : ≤ 0.005%

Auto dilution: Pre & post dilution with increase or decrease in volume

Reagent/sample probe: Liquid level detection, vertical and horizontal collision protection

Real time reagent volume monitoring function

Mixer Probe : High polished nano material

Sample Container : Regular sample tube (13x100, 13x75, 12x100, 12x75 mm)

Vacuum tube, ependrof tube, plastic tube etc.

Sample Reagent Disk : 40 positions with refrigerated (4 – 12° C)

## OPTICAL SYSTEM

Lamp : Halogen Tungsten lamp 12V 20W ≥ 2000 hrs life, with coolant based cooling system

Filter : FMSS (Full-sealed Matrix Spectrometric System)

Wave Length : 8 wavelengths: 340, 405, 450, 510, 546, 578, 630, 670 nm, (optional 800 nm)

Resolution : 0.0001Abs

Absorbance Range : 0-3.5Abs

Accuracy : 0.5A <± 0.02Abs, 1.0A <± 0.004Abs.

Stability : 0.01Abs/hr

CV : < 1.5%

Half Band Accuracy : ≤ ± 2nm

Detector: Photo detector array.

## REACTION & LAUNDRY SYSTEM

Reaction cuvette: 81 Semi permanent rigid UV plastic cuvette

(Optimal Quartz cuvette)

Wash Station : 6 Stop 11 steps wash station

Reaction Temperature: 37 ± 0.1°C

Heater: Metal thermostat for reaction disk

Reaction volume: 150 – 500 ul

## CALIBRATION & CONTROL SYSTEM

Calibration Mode: One point linear, two point linear, multi point linear, Logit-4point, Logit 5point, spline, exponential, polynomial.

Calibration Curve : Calibration curve auto check and auto curve fitting.

Q.C rule/ curve: Westgard multi rule, cumulative sum check, Twin plot.

Q.C warning: Out of control auto warning, data automatic record and analysis.

## SOFTWARE CAPABILITIES

Operating system: Window 7

LIS Interface: Bi - LIS Interface.

Report format: Multi report format/user defined format.

Online system monitor: Real time monitoring for sample disk, reagent disk, reaction disk, Q.C reaction cuvette, lamp, temperature, reagent volume, QC and Calibration curve, reaction curve, linearity range, substrate depletion, prozone check, Failure recovery, auto dilution, smart statistics analysis.

## WORKING CONDITIONS

Dimension: 855 (L)x550 (D)x580 (H)

Power Supply: AC 100 – 240V, 50/60Hz ± 1Hz ≤ 350VA

Net Weight: 75 Kg

Water consumption: 5.5 Litre

Optional Module: Barcode reader, ISE module, PC with touch screen and printer.

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

**TOLL FREE**  
**1800-270-1027**



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