VEC-150+

Random Access Clinical Chemistry Analyzer

VECTOR

With System Packs

- Fully Automatic, Discrete, Random Access Clinical Chemistry Analyzer
- Continuous STAT sampling and Open system
- Compact customize design with 6 – Stop on board Laundry Mechanism
- Throughput up to 150 photometric test/hour without ISE
- 50 special plastic cuvettes, Available optional quartz cuvettes
- High speed digital transmit with Fully Sealed Matrix Spectrophotometer System (FMSS)
- On board refrigeration of reagents and sample compartment
- Available - Ready to use System Packs

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1800-270-1027

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www.vectorbiotek.com

Reaction System and Laundry Mechanism

- 50 Semi permanent rigid UV Plastic cuvettes ensures better light transmittance
- 5 – position low volume multicell cuvette design ensures system is economical to use
- Automated onboard 6 - Stop Laundry with Detergent to ensure precise wash of cuvettes
- Metal Thermostate incubator ensures stable temperature
- Auto water blank test to know individual cuvette status

Sample and Reagent Unit

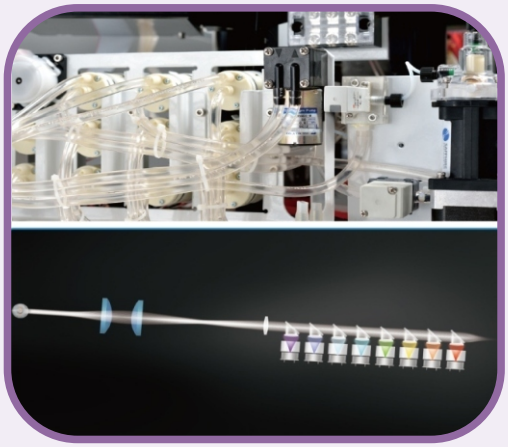
- Mute water cooling design
- Maintain on board refrigeration (4-12^{o}C) of reagent compartment to ensure of reagent long stability
- 40 reagent positions which is highest in this range of analyzers. Also available 5 virtual disks ensures widest test menu.
- Open reagent system and available system packs with 30 mL and 15 mL attractive bottle design
- On board capacity of 40 sample positions with STAT priority, positions are compatible with Test tube, Vaccutainer, Sample cup and nano tube
- Detachable reagent and sample tray

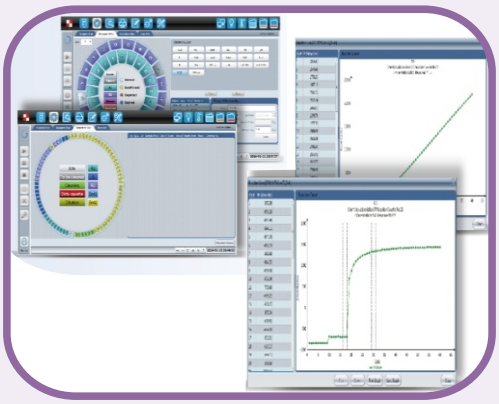
Loading unloading Mechanism

- High glossy nano material sample/ reagent which reduces adherence of any particle Liquid level detection
- Sample/reagent probes being protected from collision vertical and Horizontal
- Auto clotting removal by internal and external wash precised and accurate sample and reagent aspiration due to high accuracy ceramic syringe with the step of 0.1µl
- Unique dual vortex mixing, multiple washing steps with washing solution and automatic sample/reagent probe washing gives a complete assurance of anti contamination design.

Optical and Fluidic Unit

- High quality UV Halogen Tungsten lamp ensures 2000 hrs life
- New FMSS (Full – Sealed matrix spectrometric system) optical design for higher speed and spot photometry
- Bi chromatic testing to avoid interferences
- Increases longevity of Lamp, peltier by mute coolant based cooling
- Unique De-bubbling unit which reduces the bubbles in fluidic system
- Branded components like IWAKI pump, SMC valve, IDEX Ceramic syringe, THOMAS peristaltic pump, TYGON tubes, which makes remarkable performance of the fluidic system





User Friendly Software

- Iconic operation menu
- Automatic Recovery after collision protection, empty position and vacuum detection
- Reagent parameter loading by file, panel for reagent request
- Customize printing formats, calibration, QC and sample results
- Automated features for Dilution (Pre and Post), rerun
- HL7 Bi – LIS interface for speedy fetching of data
- Real time Identification of system working status
- Real time monitoring of reagent/sample tray, reaction tray and residual volume
- Tracking of every procedural step

Perfect Calibration and Control Program

- Multiple calibration modes
- More than 6 different level of calibrators can be programmed
- Powerful statistics and analysis system for daily QC
- QC plot: Westgard multirule, cumulative sum check, Twin plot

System Packs – VECSYS

- A Complete range of biochemistry reagent system packs
- Quality and Economical with ergonomic design of bottles
- Available reagents :
  ALP, Albumin, Amylase, Bilirubin, Cholesterol, Creatinine, Glucose, Calcium, HDL-D, LDL-D, Lipase, Phosphorus, SGPT, SGOT, Triglycerides, Total Protein, Urea – UV, & Uric Acid.

TECHNICAL SPECIFICATIONS

System Function

Category : Random Access fully automatic chemistry analyzer

Through put : 150 tests/hour without ISE

Methodology : End point, Fixed point, Kinetic

Reagent : Open System

Reagent Position : 40

Sample Position: 40

Minimum reaction Volume: 160 µL

Carryover : ≤0.005%

Water Consumption: 4. 5L/hour

Maximum Reaction Volume: 500 µL

Principle : Colorimetric, Turbidimetric, Absorbance, ISE (optional)

Test Mode : Regular Mode Single & Double reagent, Fast Mode for End point chemistry

Sample Mode : Random Access, STAT sample priority

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

Sample Reagent Mixing Probe

Sample Volume : 2-50 µL, step by 0.1 µL

Sample Disc : 40 position

Sample/Reagent probe : One probe for sample and reagent with liquid level detection, vertical and horizontal collision protection and reagent residual monitoring

Sample Tube : Regular sample tube (13x100 mm, 13x75 mm, 12x100 mm, 12x75 mm), vacuum tube, eppendorf tube, plastic tube etc.

Reagent Volume : R1: 150-450 µL, R2:10-300 µL, step by 0.1 µL

Reagent Disc : 40 reagent positions, 24 hours water cooling (4-12°C)

Reagent Bottles : 30 mL and 15 mL

Mixing Bar : Dual Vortex mixer, High-polished nano material

Auto Dilution : Pre and Post dilution with increase and decrease in volume

REACTION DISC

Reaction Cuvettes : 50 cuvettes, semi permeable rigid UV special plastic cuvettes

Reaction Temperature : 37± 0.1° C

Heating : Metal Thermalstat for reaction position

OPTICAL SYSTEM

Lamp : Halogen Tungsten Lamp, 12 V, 20 W, ≥ 2000 hours, water cycle cooling system

Filter : FMSS (Full-sealed matrix spectrometric system)

Wavelength : 340-670 nm, 8 wavelength, 800 nm optional

Resolution : 0.0001 Abs

Linear Range : 0-3.5 Abs

Accurate : 0.5 A:<±0.02 Abs, 1.0 A:<±0.04 Abs

Stray light : ≥4.5

Stability : <0.01 Abs/Hour

CV : <1.5%

Half band accurate : ≤±2 nm

Detector : Photodiode detector array

CALIBRATION AND 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 : Westgard multi rule, cumulative sum check, Twin plot

Out of control :Automatic warning for items out of control, data automatic record, automatic analysis

SOFTWARE

Operating System : Win7

Data storage : Computer and hard disc memory

LIS interface : Bi – LIS interface

Print mode : Multi default formats, self defines formats

System Monitor : Real time monitoring of Sample Disc, Reagent Disc, Reaction Disc, QC status, Reaction cuvettes system, Lamp and temperature, reagent volume, Reaction curve and QC curve. Linear range limitation, Substrate exhaustion judgement and prozone detecting. Abnormal status warning.

Other Function : User permission administration, test panel function, calculated/manual parameter programming, avoid cross contamination function, sample and reagent blank auto calculation, automatic fault recover, automatic print, data statistic

OTHERS

Computer hardware requirement : CPU 2.5 GHz, Memory 2 GB, Hard Disc 500 GB, Monitor wide screen 19 inch

PC interface : RS-232C

Dimension : 720 (L) x 450 (D) x 550 (H)

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

Net Weight : 60 Kgs

Optional parts : Reagent/sample barcode reader, water purification modular, PC, HP laser printer

* Product specifications are subject to change without prior notice.

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CIN No. U33112GJ2002PTC40978

VBPL/JULY17/VEC150+/Ver.1.1/1000