**PH METER**

**SPECIFICATION**

1. Sample and Buffer Preparation –Teaching Labs and production Environment
2. Calibration Point 2 NO
3. Warranty Minimum 2years
4. Display Type Large LCD display
5. Easy Key operation: Mode, Cal, Stability Control, OK, Scroll Navigation Large, Easy-To-Read LCD Display Instantly showing what samples and system doing
6. Auto Cal cab be set for easy recognition of daily buffer set
7. Clear status Icon and indicators
8. Simultaneously PH and Temp C or F
9. Quick Display of Electrode Calibration
10. Recognizes 16 Standard Buffers
11. Seamless 2-Point Calibration Routine.

**Automated Microbial Detection System.**

**Specification:**

Maximum Annual Bottle Volume 5-days blood culture=17,500 & 7-days blood culture 12,500

Height 103cm,

Width 132cm

Depth 78cm

Heat Emission 1,495 BTU/hr

Clearance Requirements Front=122cm,Rear=11cm,Top=61cm,Side=11cm

Operation Temparture 15-28 c

Humidity (Non-Condensing)10-90% Max.

Operating Elevation 3,000m

Line Frequence 50/60Hz+-5%

Wattage 800w

Certification UL: 3101-1:CSA:22.2 No.1010.1:IEC:61010-1:90

Capacity 240 Positions,10drawers

**REFRIGERATOR:**

**Specification**

Certification/Compliance UL and Cul Listed.TUV approved TUV approved, CE Marked, and Amperage 9.4A Capacity 11.5Cu.ft. 326 L Cabinet Material Scratch-Resistant ants Painted Breaker 15A Capacity (English) 11.5cu.ft. Capacity (Metric) 326L Chamber Martial Scratch-Resistant Painted Casters 2in. (5cm) casters (two locking, two Non locking), factory installed defrost automatic Depth (English) Interior 21.75 in. Depth (Metric) Interior 55.3cim Door count 1 Door Style Glass Exterior Finish High-Impact Powder paint coating Dimensions (L x W x H) Exterior 29.3x24x73.6 in.(74.3x61x186.9cm)Dimensions(DxWxH) Interior 21.75x20x52.4 in.(55.3x50.8x133.1cm)height(English) Interior 52.4 in. Height (English) Exterior 73.6 in. Height (Metric) Exterior 186.9cm Height (Matric) Interior 133.1cm Length (English) Exterior 29.3 in. Interior Finished High –Impact Powder paint coating Insulation CFC-Free Length (Metric) Exterior 74.3cm Plug Type 5-15P Shipping weight (English) 280LG.Shelves 4 Refrigerant CFC-and HCFC-Free R134A Shipping Weight (Metric) 127kg

Temperature Control Microprocessor

Temperature Range (Metric)1 to 8c

Voltage 115V

**Chemistry Analyzer:**

**Specification:**

**Assay Method:** Absorbance,Concentration,factor,1point end point,2point end(sample blank),fixed time,kinetic,and dichromatic,immunoturbidiametric.coagulation(optional).

**Wave length:** 7filters, 340,405,450,505,546,578,630 as standard configuration.(5 years warranty for each filter).

**Light source**: 6v 10w long life tungsten halogen lamp. Service life 2000 hours. Light should be auto shutdown function that will extend usage period. Auto sleeps function.

**Display:** 7 inch TFT Color touch screen, 260000 pixel, 57mm printer paper, paper alarm, transparent cover: easy installation

**Incubation temperature:** 37 and room temperature are standby: temperature accuracy +-0.1, by means of peltier elements.

**Flow cell capacity and optical path:** 32UL, 10mm

**Resolution**: 0.0001Abs

**Photometric Range:** 0---3.5Abs

**Absorbance Range**:.0000-2.5000(10mm flow cell) 0.0000-3.5000(6mm flow cell)

**Spectral Band:** <8nm

**Vacuum system programmable**: 200-5000 ul at least

**Carry over** :< 1%

**Stability** <0.005Abs/hour

**Absorbance precision** .0001Abs

**Absorbance drifts** :< .005Abs/hour

**Absorbance repeatability’s**<1%

**QC Analysis**: L-J QC chart, westgurad multi regulation analysis.

**Software**: window CE 6.0 Operation system, high capacity storage, edits 200 assay program 200000 results

Ultimate storage by connecting to computer.

Single chip machine, does not require window XP or window 7.

**Operational Manual**: Available in 4 different languages

**CPU**: DDR2 SDRAM: 1Gbit

**Flash**: 256MB

**Over 200 progrms**, 200,000 results can be stored.

**USB Port: USB, Keypad**: USB Printer: 4USB Ports for key boards, Mouse, Printer Disk, Bar Code **Reader.**1USB Slave for PC Connections (Supports PC Software control function)

1 Ethernet Port.

**Supports all HP Series inkjet printers**: Computer control software, IS System available,

External scanner is available supports remote diagnostics

**Operational Environment**: Temparature: 10-37.

**Humidity:** <85%

**Power supply:** Wide power supply: 100-240v, 50Hz or 60 Hz

**Dimension:** 400mm (L) X300mm (W) 160mm (H)

**Weight**: 17lbs

**HB Electrophoresis & Serum Protein Electrophoresis system.**

**Specification:**

8 Fused silica capillaries

Load up to 112 samples for walk away automation

Automate up to 160 dilutions per hour.

On-board cooled reagent and antisera bay

Custom anitsera combinations

Serum protein application

Immunodisplacement -10anitsera positions for igG/A/Kappa/Lambda)

Hb IEF-Variant analysis and quantitation in one kit

Globally recognized biomarker of alcohol abuse.

Single window management makes work list easy to navigate.

Icon led, Intuitive user interface

Multiple user-defined clinical reports available

Multiple search parameters with overlay capacity

One click to automate sample retests

Automatically queue all results for later analysis

Full control of all data sent to LIMS

Comlete reagent audit trail data from LIMS

10 Patient demographics and 12 chemistry valuves

Quick and easy upgrads as software advances

Expert system to identify abnormal samples

**Protein assays**

Protein

Protein b1-b12

High Resolution

**Immunofixation Assays**

Immunofixation

IF Penta

Bence Jones

CSF

CSF Isoelectric Focusing

AIAT Isoelectric Focusing

**Hemoglobin and Lipoproteins:**

Lipoproteins

Lipoprotiens+LP(a)

**Hematology Analyzer five parts:**

Method of operation open vail sampling

Throughput:100 samles per hours

Menu/test parameters:RBC,HGB,HCT,MCV,MCH,MCHC,RDW-SD,RDW-CV,PLT,MPV,LY%,LY#,MO%,MO#,NE%,NE#,EO%,EO#BA%,BA#

Sample Volume:12 uL of venous or micro-collected whole blood 20ul o fwhole blood per-dilute analssis.

User-Interface: Touch Screen

Handheld barcode reader:Must

Power consumption:Less then 120 w

Noise Specificition:Less then 80 dBa

Atmospheric Pressure:700-1060mbar

Operational Ambient Temprature:18-32C(64.4-89.6F)

Humidity: 80% relavtive humidity(Non-Condesning)at 32c(89.6F)

Altitude:Up to 3000 meter(9842.5 feet)

External storage-USB: USB 2.0 Compatible

Supports Serial(RS-232) and Ethernet communication: Must

Printer:USB Comptible Printer

Data Storage:30000 patients results inclusding,flags,codes,and messages

12control files,each with a maximum of 100 runs

Dimensions:.

Depth 430mm(17inches)

Width 270mm(11inches)

Height 406mm(16inches)

Weight 11.4kg(25.1lb

Operational Mnaual:yes

Warranty :2years

FDA Approved

**PLATELTE AGGROMETER:.**

Specificaion

Measuring principle:Photometry

4 Independently operating measuring cells for simultaneous determination of different tests

Measuring sensitivity down to 31.000 thrombocytes/Ul

4 reagent position,one stirred

2x15 cuvette incubations positions

Test voume:Micro cuvette for single use.

Total Min.required 150Ul Max.allowable 300Ul

Display:Touch sensitive display

Interfaces:2XRS 232C/Chip CARDTM/MMC-Card/LAN

Printer:External printer via LAN(optional)

Di Mains supply voltage 100-240V,47/63Hz mains filter and fuse holder mensions/ weight:25.0x32.5x14.0cm(9.8x12.8x5.5inch),5.3kg(11.7lb)

Assay:ADP,Adrenalin,Collagen,Ristocetin,Arachidonic Acid

HIT Von Willebrand Ristocetin cofactor assay(Optional)

Software features: All reagent individual editable

On board storage capability:up to 15 assay

Real time reaction curve recording

Automated calculation of max/min aggregation,shape

Change,lag phase,desaggregation,area and more

Max.Measuring time up to 3600sec programmable

Data transmission to MMC-Card or extrernal PC Software

Mains supply voltage 100-240V,47/63Hz mains filter and fuse holder.

**Double head Microscope:.**

**Stand;** Single mold sturdy stand with anti rust material. Extended base for better stability.siedentopf Binocular 30 dagree rotable,inter papillary distance 48-75mm(main unit).

**View Bodies:.** Dual View bridge with illuminated pointer and power supply (110v or 220v input), with Binocular observation Head,WF 10X18mm Paired eyepieces(Secondary unit)

**Eyepieces:** Focusable widefield eyepiece 10x/20mm with foldable eye guard

Nosepiece:Revese angle quadruple nosepiece(Ball bearing type) with click stops and rubber grip.

**Objectives**: RP Series infinity corrected DIN Plan Achromatic objectives 4x,10x,40x(spring loaded),100x(spring loaded,oil),anit fungus,Rackless x axis,double plate stage size 200x160mm,x/y travel range

**Mechanical stage** 78mmx54mm.low drive right hand movement controls. Hard coated surface for scratch resistance.Double specimen holder sub stage Abbe condenser NA 1.25 With asheric lens. Iris diaphragm with blue day light filter.Rack and pinion movement on stainless steel guides

Focusing Coaxial coarse and fine focusing on ball drive system for smooth operation

Illuination 6v 20w Halogen Up to 2000 hours of halogen lamp life, LED Eyepiece pointer w/ variable intensity

Electrical Universal input 100v-240v AC,50/60 Hz zeernike phase contrast kit with RP Series phase objectives.

Optional Accessories 10x/20x/40x/100x,Dark field kit, simple polarizer/Analyzer, Fluorescence attachment : Video adapter.

**Blood Gas Analyzer(ABGs):**

**Specification.**

1. Fully automated upgradable fast electrolyte and blood gas analyzer.
2. Essential measured parameters:PH,PCO2,PO2,Heamatocrit lactate, glucose,Na+,k+,Ca+,Cl-
3. Calculated parameter should include Hemoglobin,cHgb,actual bicarbonate CHCO2,Total CO2-CTCO2,base exess of extracellular fluid.BE(ecf),base excess in blood(BED)oxygen saturated SO2.
4. Sample volume less then 100ul.
5. Fast analysis time less than 60 sec.
6. Fully automated test card technology rectangular shape with built in gold plated electrodes and candcealed calibrated fluids line with microtechnology for fluide movement.
7. Data display should be on well ultimate adequate size screen display.
8. Power supply using rechargeable battery.
9. Data storage for atleast 1000 patients.
10. Ambient working temp 15-30c
11. Test card storage(at R.T) Should have local services facility must be UF-FDA/CE approval, operation and services manual should be attached.

**URINE ANALYLZER :**

**Specification**

1. Fully automated urine microscopy analyzer.
2. Throughput approx 100 sample/hours.
3. Parameter PH,Glucose,Protien,Leukocytes,Nitrates,Ketones,Urobilinogen,Bilirubin, Electrolytes,Gravity,Colour.
4. Reflection photometery,Refratrometry,SG,Testing Turbimetry,Automated Microscopy atuomaatic images evalulation.
5. LIS Communicaiton.
6. FDA approval/ISO Certified.