

ANALYSIS & DIAGNOSTIC INSTRUMENTS



Address: Gupta Agencies 5341 Punjabi Mohalla Ambala Cantt – 133001 (Haryana INDIA)

Mobile No: +91-9896301766, +91-9896311766, +91-9416021766

Email Address: info@guptaagenciesindia.com, info@labfabricatorsindia.com | Website: www.guptaagenciesindia.com

Contents

Double Beam UV-VIS Spectrophotometer 2201	1
Double Beam UV-VIS Spectrophotometer 2202	2
Double Beam UV-VIS Spectrophotometer 2203	3
Double Beam UV-VIS Spectrophotometer 2204	4
Double Beam UV-VIS Spectrophotometer 2205	5
Double Beam UV-VIS Spectrophotometer 2301	6
Single Beam UV-VIS Spectrophotometer 291	7
Single Beam UV-VIS Spectrophotometer 29	8
Visible Spectrophotometer 39	9
Single Beam VIS Spectrophotometer	9
Digital Spectrophotometers 31/38/40	10
Visual Colorimeter 790	10
FT-IR Spectrometer 4100	11
Atomic Absorption Spectrophotometer 2102	12
Atomic Absorption Spectrophotometer 2100	13
Microprocessor Dissolution Test Apparatus 7210	14
Microprocessor Dissolution Test Apparatus 721/720	15
Microprocessor Dissolution Test Apparatus 731	16
Digital Disintegration Test Apparatus 74/73	16
Microprocessor Friability Apparatus 710	17
Digital Friability Test Apparatus 70/71	17
Microprocessor Flame Photometers 6710	18
Microprocessor Flame Photometers 671/672	19
Digital Flame Photometers 66/65	20
Microprocessor karl Fischer Moisture Titrator 6310	21
Microprocessor karl Fischer Moisture Titrator 630	22
Auto Karl Fischer Titrimeter 63	23
Microprocessor Colony Counters 37/36	23
Differential Blood cell counter 21	24
Blood Roller Mixer 43	24
Microprocessor Melting/Boiling Point Apparatus 108	25
Microprocessor Melting Point Apparatus 109	26
Digital Melting Point Apparatus 115	26
Digital Tablet Hardness Tester 780	27
Digital Bulk Density Apparatus 77	27
Digital Leak Test Apparatus 75	28
Digital Moisture Balance 76	28
Automatic Polarimeter 7510	29
Digital Automatic Polarimeter 750	29
Digital Automatic Polarimeter 740	30
Digital Abbe Refractometer 738	30
Digital Viscometer 7310	31
Digital Viscometer 730	31

PCR Gradient Thermal PCR cyclers 2410	32
PCR thermal Cyclers 240	32
Bio-Nano Spectrophotometer 3101	33
Bio-Nano Spectrophotometer 3100	33
Automatic Bomb Calorimeter 1160	34
Digital Bomb Calorimeter 160	34
Digital Probe Sonicator 3510	35
Ultrasonic Cleaners 350	35
HPLC System 3201	36
Microprocessor pH Meter 5001	37
Microprocessor pH Meter 501	37
Microprocessor pH Meter 50	38
Microprocessor pH Meter 49	38
Digital pH Meters 10/11	39
Digital PH-COND Cum Temperature Meter 23	39
Microprocessor CONE-TDS-SAL Meter 5100	40
Microprocessor Cond-TDS-SAL Meter 51	40
Digital Auto Conductivity Meters 16/26	41
Digital Auto 15	41
Microprocessor Based Photo Colorimeter 111	42
Digital Fully Automatic Colorimeter Digital Filters 116	42
Digital Photo Colorimeter Auto Zero 114	43
Deluxe Photo Colorimeter Inbuilt Battery 112	43
Digital Photo Colorimeter 12	44
Digital BYY Bath Incubator 42	44
Microprocessor Haemoglobin Meter 113	45
Portable Haemoglobin Meter 113P	45
Digital Potentiometer Inbuilt Stirrer 22	46
Digital Potentiometer 32	46
Portable Turbidity Meter Research Grade 340	47
Microprocessor Turbidity 35	47
Digital Turbidity Meters 33/34	48
Digital Photo Fluorometer 330	48
Microprocessor D. O Meter 52	49
Digital D.O Meter 18/27	49
Water & Soil Analysis 59/60/61/62	50
Specifications	51
Water & Soil 14/17/19/28	52
Bio-Chemistry Analyzer 1201	53
Automatic Hematology Analyzer 1290	54
Microplate Elisa Reader 1260	55
Microplate Elisa Washer 1261	55
Urine Analyzer 1240	56
Coagulation Analyzer 1232	56

2201

DOUBLE BEAM

UV-VIS SPECTROPHOTOMETER



TECHNICAL SPECIFICATIONS

FUNCTION	Basic, Wavelength Scan, Multi Wavelength, Kinetics, Quantitative, DNA/Protein
WAVELENGTH RANGE	190 - 1100 nm
SPECTRAL BANDWIDTH	1.0 nm
OPTICAL SYSTEM	Double Beam, Grating 1200 lines/mm
WAVELENGTH ACCURACY	± 0.1 nm
WAVELENGTH REPEATABILITY	± 0.1 nm.
SCANNING SPEED	HI, MED & LOW, MAX. 3600 nm/min
PHOTOMETRIC ACCURACY	± 0.3 %T or ± 0.002 A/h @1A
PHOTOMETRIC RANGE	%T : 0 - 200% Abs : -0.3 to 3A Conc. : 0 - 9999 C
STRAY LIGHT	< 0.03 %T @ 220 nm & 360 nm
STABILITY	± 0.001 A/h @ 500 nm
DISPLAY	7 Inches TFT Color Screen
BASELINE FLATNESS	± 0.001A/h (200 - 1000 nm)
SAMPLE COMPARTMENT	2 cell holder 10 mm path- length. (50 mm & 100 mm path-length optional at extra cost)
LIGHT SOURCE	Halogen & Deuterium Lamps (Pre-Aligned)
OUTPUT PORTS	USB DRIVE, USB HOST & RS232
POWER	230 V ± 10% AC, 50 Hz
DIMENSIONS (L x B x H)	Instrument : 810 x 660 x 390 mm (Approx.)
WEIGHT	Instrument : 27.0 Kg. (Approx.)

SALIENT FEATURES

- ✓ Double Beam Optics
- ✓ 7 Inches TFT Color Screen
- ✓ Auto Wavelength Setting
- ✓ On-screen Standard and Kinetic Curve Display
- ✓ Tungsten/Deuterium Lamp can be turned ON/OFF Individually to Extend Lifetime
- ✓ Application Software provides complete control of the instrument from a computer through the built-in USB Port.
- ✓ Basic, WL Scan, Multi-Wavelength, Kinetic, Quantitative, DNA/Protein modes
- ✓ Pre-aligned design makes it convenient to change Lamps
- ✓ Large Sample Compartment can accommodate 5-100 mm path-length cuvettes with optional holders.

STANDARD ACCESSORIES

Quartz Cuvettes - A Set of 2
Glass Cuvettes - A Set of 4
Instruction Manual
Software Manual
Software CD
USB Data Cable for PC Connectivity
Mains Lead
Dust Cover



2202

DOUBLE BEAM

UV-VIS SPECTROPHOTOMETER
8 CELL HOLDER



TECHNICAL SPECIFICATIONS

FUNCTION	Basic, Wavelength Scan, Multi Wavelength, Kinetics, Quantitative, DNA/Protein
WAVELENGTH RANGE	190 - 1100 nm
SPECTRAL BANDWIDTH	1.0 nm
OPTICAL SYSTEM	Double Beam, Grating 1200 lines/mm
WAVELENGTH ACCURACY	± 0.1 nm
WAVELENGTH REPEATABILITY	± 0.1 nm.
SCANNING SPEED	HI, MED & LOW, MAX. 3600 nm/min
PHOTOMETRIC ACCURACY	± 0.3 %T or ± 0.002 A/h @1A
PHOTOMETRIC RANGE	%T : 0 - 200% Abs : -0.3 to 3A Conc. : 0 - 9999 C
STRAY LIGHT	≤ 0.03 %T @ 220 nm & 360 nm
STABILITY	± 0.001 A/h @ 500 nm
DISPLAY	7 Inches TFT Color Screen
BASELINE FLATNESS	± 0.001A/h (200 - 1000 nm)
SAMPLE COMPARTMENT	8 cell with automatic cell changer - 10 mm path-length.
LIGHT SOURCE	Halogen & Deuterium Lamps (Pre-Aligned)
OUTPUT PORTS	USB DRIVE, USB HOST & RS232
POWER	230 V ± 10% AC, 50 Hz
DIMENSIONS (L x B x H)	Instrument : 810 x 660 x 390 mm (Approx.)
WEIGHT	Instrument : 27 Kg. (Approx.)

SALIENT FEATURES

- ✓ Double Beam Optics
- ✓ 7 Inches TFT Color Screen
- ✓ Auto Wavelength Setting
- ✓ On-screen Standard and Kinetic Curve Display
- ✓ Tungsten/Deuterium Lamp can be turned ON/OFF Individually to Extend Lifetime
- ✓ Application Software provides complete control of the instrument from a computer through the built-in USB Port.
- ✓ Basic, WL Scan, Multi-Wavelength, Kinetic, Quantitative, DNA/Protein modes
- ✓ Pre-aligned design makes it convenient to change Lamps
- ✓ 8-Position Auto Cell Changer of 10mm path-length provided.

STANDARD ACCESSORIES

Quartz Cuvettes - A Set of 2
Glass Cuvettes - A Set of 4
Instruction Manual
Software Manual
Software CD
USB Data Cable for PC Connectivity
Mains Lead
Dust Cover



2203

DOUBLE BEAM

UV-VIS SPECTROPHOTOMETER
VARIABLE BANDWIDTH



TECHNICAL SPECIFICATIONS

FUNCTION	Basic, Wavelength Scan, Multi Wavelength, Kinetics, Quantitative, DNA/Protein
WAVELENGTH RANGE	190 - 1100 nm
SPECTRAL BANDWIDTH	0.5/1.0/1.8/2.0/4.0/5.0nm (Variable)
OPTICAL SYSTEM	Double Beam, Grating 1200 lines/mm
WAVELENGTH ACCURACY	± 0.1 nm
WAVELENGTH REPEATABILITY	± 0.1 nm.
SCANNING SPEED	HI, MED & LOW, MAX. 3600 nm/min
PHOTOMETRIC ACCURACY	± 0.3 %T or ± 0.002 A/h @1A
PHOTOMETRIC RANGE	%T : 0 - 400% Abs : -0.4 to 4Abs Conc. : 0 - 9999 C
STRAY LIGHT	< 0.05 %T @ 220 nm & 360 nm
STABILITY	± 0.001 A/h @ 500 nm
DISPLAY	5 Inches 320 x 240 Dots Graphical LCD
BASELINE FLATNESS	± 0.001A/h (200 - 1000 nm)
SAMPLE COMPARTMENT	2 cell holder 10 mm path-length. (50 mm path-length optional at extra cost)
LIGHT SOURCE	Halogen & Deuterium Lamps (Pre-Aligned)
PRINTER INTERFACE	Parallel port for Dot Matrix
PC CONNECTIVITY	USB Port for PC Connectivity
POWER	230 V ± 10% AC, 50 Hz
DIMENSIONS (L x B x H)	Instrument : 760 x 550 x 240 mm (Approx.)
WEIGHT	Instrument : 20.0 Kg. (Approx.)

SALIENT FEATURES

- ✓ Double Beam Optics
- ✓ 320 x 240 Dots Graphical LCD
- ✓ Auto Wavelength Setting at 0.1nm interval
- ✓ On-screen Standard and Kinetic Curve Display
- ✓ Tungsten/Deuterium Lamp can be turned ON/OFF Individually to Extend Lifetime
- ✓ Application Software provides complete control of the instrument from a computer through the built-in USB Port.
- ✓ Basic, WL Scan, Multi-Wavelength, Kinetic, Quantitative, DNA/Proteinmodes
- ✓ Pre-aligned design makes it convenient to change Lamps
- ✓ Large Sample Compartment, can accommodate 5-100 mm path-length cuvettes with optional holders.
- ✓ Optional Sipper Pump

STANDARD ACCESSORIES

Quartz Cuvettes - A Set of 2
Glass Cuvettes - A Set of 4
Instruction Manual
Software Manual
Software CD
USB Data Cable for PC Connectivity
Mains Lead
Dust Cover



2204 DOUBLE BEAM

UV-VIS SPECTROPHOTOMETER
VARIABLE BANDWIDTH WITH 8 CELL CHANGER



TECHNICAL SPECIFICATIONS

FUNCTION	Basic, Wavelength Scan, Multi Wavelength, Kinetics, Quantitative, DNA/Protein
WAVELENGTH RANGE	190 - 1100 nm
SPECTRAL BANDWIDTH	0.5/1.0/2.0/4.0/5.0nm (Variable)
OPTICAL SYSTEM	Double Beam, Grating 1200 lines/mm
WAVELENGTH ACCURACY	± 0.1 nm
WAVELENGTH REPEATABILITY	± 0.1 nm.
SCANNING SPEED	HI, MED & LOW, MAX. 3600 nm/min
PHOTOMETRIC ACCURACY	± 0.3 %T or ± 0.002 A/h @1A
PHOTOMETRIC RANGE	%T : 0 - 400% Abs : -0.3 to 4Abs Conc. : 0 - 9999 C
STRAY LIGHT	≤ 0.03 % @ 220 nm & 360 nm
STABILITY	± 0.001 A/h @ 500 nm
DISPLAY	5 Inches 320 x 240 Dots Graphical LCD
BASELINE FLATNESS	± 0.001A/h (200 - 1000 nm)
AMPLE COMPARTMENT	8 cell with automatic cell changer -10 mm path-length.
LIGHT SOURCE	Halogen & Deuterium Lamps (Pre-Aligned)
PRINTER INTERFACE	Parallel port for Dot Matrix
PC CONNECTIVITY	USB Port for PC Connectivity
POWER	230 V ± 10% AC, 50 Hz
DIMENSIONS (L x B x H)	Instrument : 760 x 550 x 240 mm (Approx.)
WEIGHT	Instrument : 20.0 Kg. (Approx.)

SALIENT FEATURES

- ✓ Double Beam Optics
- ✓ 320 x 240 Dots Graphical LCD
- ✓ Auto Wavelength Setting at 0.1nm interval
- ✓ On-screen Standard and Kinetic Curve Display
- ✓ Tungsten/Deuterium Lamp can be turned ON/OFF Individually to Extend Lifetime
- ✓ Application Software provides complete control of the instrument from a computer through the built-in USB Port.
- ✓ Basic, WL Scan, Multi-Wavelength, Kinetic, Quantitative, DNA/Proteinmodes
- ✓ Pre-aligned design makes it convenient to change Lamps
- ✓ 8-Position Auto Cell Changer of 10 mm Path- length provided.

STANDARD ACCESSORIES

Quartz Cuvettes - A Set of 2
Glass Cuvettes - A Set of 4
Instruction Manual
Software Manual
Software CD
USB Data Cable for PC Connectivity
Mains Lead
Dust Cover



2205

DOUBLE BEAM

UV-VIS SPECTROPHOTOMETER
TOUCH SCREEN



TECHNICAL SPECIFICATIONS

FUNCTION	Basic, Wavelength Scan, Multi Wavelength, Kinetics, Quantitative, DNA/Protein
WAVELENGTH RANGE	190 - 1100 nm
SPECTRAL BANDWIDTH	1 nm
OPTICAL SYSTEM	Double Beam, Grating 1200 lines/mm
WAVELENGTH ACCURACY	± 0.1 nm
WAVELENGTH REPEATABILITY	± 0.1 nm.
SCANNING SPEED	HI, MED & LOW, MAX. 3600 nm/min
PHOTOMETRIC ACCURACY	± 0.3 %T or ± 0.002 A/h @1A
PHOTOMETRIC RANGE	%T : 0 - 200% Abs : -0.3 to 3A Conc. : 0 - 9999 C
STRAY LIGHT	≤ 0.03 % @ 220 nm & 360 nm
STABILITY	± 0.001 A/h @ 500 nm
DISPLAY	10.1 Inches Colored Touch Screen
BASELINE FLATNESS	± 0.001 A/h (200 - 1000 nm)
SAMPLE COMPARTMENT	2 cell -10 mm path-length.
LIGHT SOURCE	Halogen & Deuterium Lamps (Pre-Aligned)
PRINTER INTERFACE	Parallel port for Dot Matrix
PC CONNECTIVITY	USB Port for PC Connectivity
POWER	230 V $\pm 10\%$ AC, 50 Hz
DIMENSIONS (L x B x H)	Instrument : 810 x 660 x 390 mm (Approx.)
WEIGHT	Instrument : 27 Kg. (Approx.)

SALIENT FEATURES

- ✓ Double Beam Optics
- ✓ 10.1 Inches Colored Touch Screen
- ✓ Auto Wavelength Setting at 0.1nm interval
- ✓ On-screen Standard and Kinetic Curve Display
- ✓ Tungsten/Deuterium Lamp can be turned ON/OFF Individually to Extend Lifetime
- ✓ Application Software provides complete control of the instrument from a computer through the built-in USB Port.
- ✓ Basic, WL Scan, Multi-Wavelength, Kinetic, Quantitative, DNA/Proteinmodes
- ✓ Pre-aligned design makes it convenient to change Lamps

STANDARD ACCESSORIES

Quartz Cuvettes - A Set of 2
Glass Cuvettes - A Set of 4
Instruction Manual
Software Manual
Software CD
USB Data Cable for PC Connectivity
Mains Lead
Dust Cover



2301



DOUBLE BEAM

UV-VIS SPECTROPHOTOMETER
XENON LAMP



TECHNICAL SPECIFICATIONS

FUNCTION	Basic, Wavelength Scan, Multi Wavelength, Kinetics, Quantitative, DNA/Protein
WAVELENGTH RANGE	190 - 1100 nm
SPECTRAL BANDWIDTH	1 nm
OPTICAL SYSTEM	Double Beam, Grating 1200 lines/mm
WAVELENGTH ACCURACY	± 0.1 nm
WAVELENGTH REPEATABILITY	± 0.1 nm.
SCANNING SPEED	HI, MED & LOW, MAX. 3600 nm/min
PHOTOMETRIC ACCURACY	± 0.3 %T or ± 0.002 A/h @1A
PHOTOMETRIC RANGE	%T : 0 - 200% Abs : -0.3 to 3A Conc. : 0 - 9999 C
STRAY LIGHT	≤ 0.03 % @ 220 nm & 360 nm
STABILITY	± 0.001 A/h @ 500 nm
DISPLAY	7 Inches TFT Colored Screen
BASELINE FLATNESS	± 0.001A/h (200 - 1000 nm)
SAMPLE COMPARTMENT	2 cell holder -10 mm path-length.
LIGHT SOURCE	Xenon Lamp
OUTPUT PORTS	USB DRIVE, USB HOST & RS232
POWER	230 V ± 10% AC, 50 Hz
DIMENSIONS (L x B x H)	Instrument : 810 x 660 x 390 mm (Approx.)
WEIGHT	Instrument : 27 Kg. (Approx.)

SALIENT FEATURES

- ✓ Double Beam Optics
- ✓ 7 Inches TFT Colored Screen
- ✓ Auto Wavelength Setting at 0.1nm interval
- ✓ On-screen Standard and Kinetic Curve Display
- ✓ Xenon Lamp for Extend Lifetime
- ✓ Application Software provides complete control of the instrument from a computer through the built-in USB Port.
- ✓ Basic, WL Scan, Multi-Wavelength, Kinetic, Quantitative, DNA/Proteinmodes

STANDARD ACCESSORIES

Quartz Cuvettes - A Set of 2
Glass Cuvettes - A Set of 4
Instruction Manual
Software Manual
Software CD
USB Data Cable for PC Connectivity
Mains Lead
Dust Cover



291 SINGLE BEAM

UV-VIS SPECTROPHOTOMETER
WITH PROFESSIONAL SCANNING SOFTWARE



TECHNICAL SPECIFICATIONS

WAVELENGTH RANGE	190 - 1100 nm
SPECTRAL BANDWIDTH	2 nm
OPTICAL SYSTEM	Single Beam, grating 1200 lines/mm
WAVELENGTH ACCURACY	± 0.2 nm
WAVELENGTH REPEATABILITY	± 0.1 nm
WAVELENGTH RESOLUTION	± 0.1 nm
PHOTOMETRIC ACCURACY	± 0.5 %T or 0.003 A@1A
PHOTOMETRIC RANGE	- 0.3 to 3A, 0 - 200 %T, 0 - 9999 Conc.
STRAY LIGHT	≤ 0.3 %T
STABILITY	± 0.002 A/h @500 nm
DISPLAY	128 x 64 Dots Large Graphical LCD
KEYBOARD	Soft Touch Membrane Keys
PHOTOMETRIC MODE	% Transmission, Absorbance and Concentration
DETECTOR	Silicon Photodiode
SAMPLE COMPARTMENT	Standard 4-Position 10 mm path-length cuvette holder. (Accommodates upto 100 mm path-length cuvette with optional holder)
LIGHT SOURCE	Tungsten and Deuterium Lamps
OUTPUT	USB for PC Connectivity and Parallel Port for Dot Matrix Printer
PC SOFTWARE	Basic PC Software provided for quantitative / kinetic analysis with Professional PC Software for additional wavelength scan and DNA/Protein Test.
POWER	230 V ± 10% AC, 50 Hz
DIMENSIONS	Instrument : 700 x 550 x 340 mm (L x B x H) (Approx.)

SALIENT FEATURES

- ✓ Covers 190 to 1100 nm
- ✓ 4 Position Cuvette Holder
- ✓ Automatic Wavelength Selection
- ✓ 128x64 Graphical LCD
- ✓ Printer Interface
- ✓ USB Computer Interface
- ✓ With Professional Scanning Software

STANDARD ACCESSORIES

- Quartz Cuvettes - A Set of 2
- Glass Cuvettes - A Set of 4
- Instruction Manual
- Software Manual
- Software CD
- USB Data Cable for PC Connectivity
- Mains Lead
- Dust Cover



29

SINGLE BEAM

UV-VIS SPECTROPHOTOMETER



TECHNICAL SPECIFICATIONS

WAVELENGTH RANGE	200 - 1020 nm
SPECTRAL BANDWIDTH	2 nm
OPTICAL SYSTEM	Single Beam, grating 1200 lines/mm
WAVELENGTH ACCURACY	± 1 nm
WAVELENGTH REPEATABILITY	2.0 nm
WAVELENGTH RESOLUTION	2.0 nm
PHOTOMETRIC ACCURACY	± 0.5 %T or 0.003 A@1A
PHOTOMETRIC RANGE	- 0.3 to 2A, 0 - 200 %T, 0 - 9999 Conc.
STRAY LIGHT	< 0.3 %T
STABILITY	± 0.002 A/h @500 nm
DISPLAY	LCD
KEYBOARD	Soft Touch Membrane Keys
PHOTOMETRIC MODE	% Transmission, Absorbance and Concentration
DETECTOR	Silicon Photodiode
SAMPLE COMPARTMENT	Standard 4-Position 10 mm path-length cuvette holder. (Accommodates up to 100 mm path-length cuvette with optional holder)
LIGHT SOURCE	Tungsten and Deuterium Lamps
OUTPUT	RS 232/USB for PC Connectivity
POWER	230 V±10% AC, 50 Hz

SALIENT FEATURES

- ✓ Covers 190 to 1020 nm
- ✓ 4 Position Cuvette Holder
- ✓ LCD Data Display
- ✓ Printer Interface
- ✓ RS-232C Computer Interface
- ✓ Automatic Lamp Selection between UV & Visible Range

STANDARD ACCESSORIES

Quartz Cuvettes - A Set of 2
 Glass Cuvettes - A Set of 4
 Instruction Manual
 Software Manual
 Software CD
 RS232 Cable for PC Connectivity
 Mains Lead
 Dust Cover



39 VISIBLE

SPECTROPHOTOMETER MICROPROCESSOR BASED TECHNICAL SPECIFICATIONS

OPTICAL SYSTEM	Czerny-turner CT grating monochromator, 1200 lines / mm
WAVELENGTH RANGE	320-1020nm
SPECTRAL BANDWIDTH	4nm
WAVELENGTH ACCURACY	2 nm
WAVELENGTH REPEATABILITY	≤2 nm
MEASUREMENT RANGE	-0.000 to 1.999A , 0-199.9%
PHOTOMETRIC ACCURACY	±1%T
PHOTOMETRIC REPEATABILITY	0.5%T
MEASURING OPTICAL PATH	50 mm
STRAY LIGHT	± 1.0%T (340 nm)
STABILITY	± 0.004 A/h(500 nm preheat 1 hour)
DISPLAY MODES	4 modes, LCD
BASIC MEASUREMENT	T, A, C, F
LIGHT SOURCE	6V10W
OPERATING VOLTAGE	220V/110VAC,50-60Hz



SALIENT FEATURES

- ✓ Large Sample Room to Place 50mm Cuvette
- ✓ Digital Display of %T, Abs and Conc.
- ✓ Auto Light Door and Zero Setting
- ✓ Compact Design
- ✓ Covers 320 - 1020 nm

STANDARD ACCESSORIES

Glass Cuvettes - A Set of 2
Instruction Manual
RS232 Cable for PC Connectivity
Mains Lead
Dust Cover



41

SINGLE BEAM

VIS SPECTROPHOTOMETER SCANNING BASED



TECHNICAL SPECIFICATIONS

WAVELENGTH RANGE	320 - 1100 nm
SPECTRAL BANDWIDTH	2 nm
OPTICAL SYSTEM	Single Beam, grating 1200 lines/mm
WAVELENGTH ACCURACY	± 0.5 nm
WAVELENGTH REPEATABILITY	0.3 nm
WAVELENGTH RESOLUTION	0.1 nm
PHOTOMETRIC ACCURACY	± 0.3 %T or 0.003 A@1A
PHOTOMETRIC RANGE	-0.3 to 3A,0-200%T,0-9999 conc.
PHOTOMETRIC REPEATABILITY	±0.2%T
STRAY LIGHT	<0.3%T
STABILITY	±0.002A/h@500nm
DISPLAY	128 x 64 Dots Large Graphical LCD
PHOTOMETRIC MODE	% Transmission, Absorbance and Concentration, Scanning etc.
KEYBOARD	Soft Touch Membrane Keys



SAMPLE COMPARTMENT

LIGHT SOURCE
DETECTOR
OUTPUT

PC SOFTWARE

POWER

Standard 4-Position 10 mm path-length cuvette holder. (Accommodates upto 100 mm path-length, cuvette with optional holder)
Tungsten Lamps
Silicon Photodiode
USB for PC Connectivity and Parallel Port for Dot Matrex Printer
Basic PC Software provided for quantitative /kinetic analysis with Professional PC Software for additional wavelength scan and DNA/Protein Test.
230V±10% AC, 50 Hz



31/38/40 DIGITAL

SPECTROPHOTOMETERS

TECHNICAL SPECIFICATIONS

RANGE	340 to 960 nm
RESOLUTION	0.1% T, Abs : 0.001, Conc. : 1
OUTPUT	% T: 0 to 100%, Abs : 0 to 1.999, Conc. : 0 to 1999,
DETECTOR	Silicon Photodiode
LIGHT SOURCE	6 V, 10 W, Tungsten Halogen Lamp
MONOCHROMATOR	600 lines/mm holographic grating
SAMPLE HOLDER	10 mm Cuvette holder for LT-31 10 mm & 50 mm Cuvette holder for LT-38 10 mm, 50 mm & 100 mm Cuvette holder for LT-40
SPECTRAL BANDWIDTH	5 nm
WAVELENGTH RESOLUTION	1 nm
WAVELENGTH ACCURACY	± 2.5 nm
REPEATABILITY	± 2 nm
DISPLAY	3¼ Digit Bright Red LED Dual Display for Data & Wavelength
OPERATING TEMP. RANGE	50 to 450C
POWER	230 V±10% AC, 50 Hz
DIMENSIONS (LxBxH)	475 x 285 x 130 mm (Approx.)
WEIGHT	8.5 Kg. (Approx.)



SALIENT FEATURES

- ✓ Range 340 to 960 nm
- ✓ Dual Digital Display for Wavelength & Data
- ✓ Wavelength Resolution 1 nm
- ✓ Highly Stable & Accurate
- ✓ Direct Concentration Facility
- ✓ 10 mm, 50 mm & 100mm path length

STANDARD ACCESSORIES

Cuvettes (10 mm) : 2 Nos. (Model LT-31)
Cuvettes (10 mm & 50 mm) : 2 Nos. (Model LT-38)
Cuvettes (10 mm, 50 mm & 100 mm) : 2 Nos. (Model LT-40)
Dust Cover : 1 No.
Operation Manual : 1 No.



790 Visual



Colorimeter

TECHNICAL SPECIFICATIONS

Model	LT-790
Measuring principle	Visual, in terms of international colour scale units
Modes	Transmittance, reflectance
Measurement range	0.1-79.9 Red 0.1-79.9 Yellow 0.1-49.9 Blue 0.1-3.9 Neutral 0.1
Minimum Reading	0.1
Resolution	0.1 colour scale unit
Viewing system	Fully adjustable
Light Source	Incandescent lamp
Illuminant	Approximates to daylight
Path Length	Up to 180 mm
The diffuse reflect activity of White plate	> 80%
The amplification of the magnifiers	1.9 x
The dimension of Colorimetric utensil	10 x 20 x 40mm, 25.4x20x40mm, 133.4 x 20 x 40mm
Power supply & Power Watts	AC 220 V/ 50 Hz & 50W
Weight (Gross)	13kg
Overall dimensions	620mm x 440mm x 300mm



4100 FT-IR SPECTROMETER



TECHNICAL SPECIFICATIONS

Spectral Range	7800 to 350 cm ⁻¹
Resolution	Better than 0.85 cm ⁻¹
Wavelength Accuracy	±0.01 cm ⁻¹
Scanning speed	5- step adjustable for different applications.
Signal to noise ratio	Better than 20,000 (RMS Value, at 2100 cm ⁻¹ , resolution : 4 cm ⁻¹ , detector DTGS. 1 minute data collection)
Beam Splitter	Ge COATED KBr
Infrared source	Air Cooled, high efficiency, Reflex sphere module
Detector	DTGS
Data system	Compatible computer
Software	FT-IR software contains all routines need for basic spectrophotometer operations, including library search, quantitation and spectrum export.
Interferometer	Cube-corner Michelson Interferometer
IR Library	11R libraries included
Dimensions	540 x 520 x 260 mm
Weight	24 Kgs.
POWER SUPPLY	230 V ±10%, 50 Hz

SALIENT FEATURES

- ✓ High Intensity IR source
- ✓ High Sensitive optical system
- ✓ Wide Sample Compartment
- ✓ High stability modular partition design
- ✓ Plug & Play Operation
- ✓ Provided with Various Special IR Libraries

STANDARD ACCESSORIES

Transmission sample holder
Thin Standard Film
Software CD
USB Cable
Tool Kit
Manual
Dust Cover



2102

ATOMIC ABSORPTION

SPECTROPHOTOMETER DOUBLE BEAM



TECHNICAL SPECIFICATIONS

PARAMETER	Computer controlled, High performance, optically double beam Atomic Absorption Spectrometer having following specifications.
OPTICS	Real time Double beam with Deuterium background
MONOCHROMATOR	CZ design with 330 mm focal length, 1800 line/mm grating and 185-930 nm wavelength range. Automatic emission wavelength selection and peaking. Continuously variable slits with 0.2 to 2 nm spectral bandwidth. Automatic wavelength scanning. Selected wide range
DETECTOR	High performance multi-alkali Photo multiplier tube R928
MOTORIZED LAMP TURRET	Eight lamp motorized turret with automatic lamp selection and individual lamp peaking automatically warmed up. Compatible with standard & coded hollow cathode lamps
BACKGROUND CORRECTION	Deuterium arc Radiation ULTRA FAST-PULSE 1024 Hz background corrector Wave length correction range 185-425 nm., Corrects to 2.5 total absorbance
AUTOMATIC FLAME CONTROL UNIT	Programmable gas controller with digital display of flow, Full safety interlock including built in pressure regulator on both lines, power failure protection, auto shut down of flame, burner drain, door interlock and electronic flame igniter & real time status sensing, fitted bung and pressure relief bung
NEBULIZER	Fully inert nebulizer
SPRAY CHAMBER	PTFE spray chamber and adjustable impact bead aerosol.
BURNER	Titanium burners for C2 H2 -N2O & C2H2- AIR
SENSITIVITY	Greater than 0.7 abs for 5 mg/L coppersolution with an RSD of less than 0.5% Characteristics concentration of copper 0.030 ug/ml
OUTPUT PORT	USB /Wi-Fi/ BLUETOOTH CONNECTIVITY FOR PC
SOFTWARE	Windows 10 based user friendly software
DIMENSION	100 x 55 x 58 cm (L x H x W) cm
WEIGHT	65 kg, Unpacked
ELECTRICAL REQUIREMENTS	220/240 V AC, 50/60 Hz, 800 VA
HOLLOW CATHODE LAMPS	67 Element high intensity Single Element available

SALIENT FEATURES

- ✓ Highly Stable and accurate
- ✓ True Double Beam Optics
- ✓ 8 lamp turret
- ✓ Range 185 - 900 nm
- ✓ 1800 lines grating (USA)
- ✓ Variable Bandwidth 0.1 to 2 nm
- ✓ User friendly software

STANDARD ACCESSORIES

- Software CD
- USB Cable
- Manual
- Dust Cover
- Cathode Lamps (Optional)
- Acetylene Cylinder (Optional)
- Nitrous Oxide Cylinder (Optional)
- Regulators (Optional)
- Moisture Filter (Optional)
- Compressor (Optional)



2100 ATOMIC ABSORPTION

SPECTROPHOTOMETER
SINGLE BEAM



TECHNICAL SPECIFICATIONS

PARAMETER	Computer controlled, High performance, optically single beam Atomic Absorption Spectrometer having following specifications.
OPTICS	Real time Single beam with Deuterium background
MONOCHROMATOR	CZ design with 330 mm focal length, 1800 line/mm grating and 185-930 nm wavelength range. Automatic emission wavelength selection and peaking. Continuously variable slits with 0.2 to 2 nm spectral bandwidth. Automatic wavelength scanning. Selected wide range
DETECTOR	High performance multi-alkali Photo multiplier tube R928
MOTORIZED LAMP TURRET	8 lamp motorized turret with automatic lamp selection and individual lamp peaking automatically warmed up. Compatible with standard & coded hollow cathode lamps
FLAME CONTROL UNIT	Manual flame control fully safe & sturdy having independent flow meter
NEBULIZER	Fully inert nebulizer
SPRAY CHAMBER	PTFE spray chamber and adjustable impact bead aerosol.
BURNER	Titanium burners for $C_2H_2-N_2O$ & C_2H_2-AIR
SENSITIVITY	Greater than 0.7 abs for 5 mg/L copper solution with an RSD of less than 0.5% Characteristics concentration of copper 0.030 ug/ml
OUTPUT PORT	RS 232 / USB
SOFTWARE	Windows 10 based user friendly software
DIMENSION	100 x 55 x 58 cm (L x H x W) cm
WEIGHT	65 kg, Unpacked
ELECTRICAL REQUIREMENTS	220/240 V AC, 50/60 Hz, 800 VA
HOLLOW CATHODE LAMPS	67 Element high intensity Single Element available

SALIENT FEATURES

- ✓ Highly Stable and accurate
- ✓ Single Beam Optics
- ✓ 8 lamp turret
- ✓ user friendly software
- ✓ Range 185 - 900 nm
- ✓ 1800 lines grating

STANDARD ACCESSORIES

Software CD
USB Cable
Manual
Dust Cover
Cathode Lamps (Optional)
Acetylene Cylinder (Optional)
Nitrous Oxide Cylinder (Optional)
Regulators (Optional)
Moisture Filter (Optional)
Compressor (Optional)



7210

MICROPROCESSOR

DISSOLUTION TEST APPARATUS

TOUCH SCREEN



TECHNICAL SPECIFICATIONS

GENERAL

Stations	8 basket
Display	7 Inches Colored Touch Screen
Prog. Mode	Routine, Sustain and Control mode. Facility for 20 different test setups available in Routine and Sustain mode.
Printer	Provision for the attachment of dot-matrix printer with centronics parallel port interface available.

STIRRER

Speed	25 – 200 RPM, ± 1 RPM
Resolution	1 RPM
Accuracy	± 1 RPM

TEMPERATURE

Range	30 to 50° C
Accuracy	$\pm 1^\circ$ C
Temp. Control	Microprocessor Based using PT100/Semiconductor Sensor

SAMPLE

Reaction Vessel	1000 ml jars with stirrer pedals and baskets
Heater	1 KW
Power	230 V $\pm 10\%$, 50 Hz. AC

SALIENT FEATURES

- ✓ 7 Inches Colored Touch Screen
- ✓ Password protected data login facility.
- ✓ Complies with USP, IP specifications
- ✓ Extremely Useful for Pharmaceutical Labs
- ✓ Highly Accurate and Easy to Operate
- ✓ Programmable Stirrer Speed Control i.e. (25 – 200 RPM)
- ✓ USB Interface Available
- ✓ Three Programming Modes i.e. Routine, Sustain and Control
- ✓ 40 Independent Programmable Setups for Routine and Sustain Mode with Storage Facility
- ✓ 400 Samples Storage Facility
- ✓ Printer Attachment Facility
- ✓ Audio Visual Indicators for System Status
- ✓ Easy to Empty & Clean the Water bath with Bottom Drainage
- ✓ Continuation of Last Sample Run in case of Power Failure

STANDARD ACCESSORIES

Main Unit with Acrylic Tank and Rectangular Cover Plate and Water Bath Temperature Sensor (T1)
 Heater Bath Circulating Pump
 External Temperature Sensor (T2) for Vessel
 Reaction Vessel capacity 1000 ml ((8 Nos.)
 Round Acrylic Cover Plate with Hole and a large slit(8 Nos.)
 S.S. Paddle, S.S Wire Mesh Basket (8 Nos.)
 Glass pipettes with rubber bellows
 Mains Lead
 Instruction Manual
 Dust Cover



721/720

MICROPROCESSOR

DISSOLUTION TEST APPARATUS



TECHNICAL SPECIFICATIONS

GENERAL

Stations	8 Station in Model - 721 6 Station in Model - 720
Display	20 x 4 line Alphanumeric LCD display with back list
Keyboard	19 soft touch membrane type keys
LED	6 LED's, 3 LED's for Test status like Run, Alarm, End and 2 LED's for Platform up/down status and one for heater ON/OFF status.
Prog. Mode	Routine, Sustain and Control mode. Facility for 20 different test setups available in Routine and Sustain mode.
PC Connectivity	USB interface available
STIRRER	
Speed	25 – 200 RPM, ± 1 RPM
Resolution	1 RPM
Accuracy	± 1 RPM
TEMPERATURE	
Range	30 to 50 °C
Accuracy	± 0.2 °C
Temp. Control	Microprocessor Based using PT100/Semiconductor Sensor
SAMPLE	
Reaction Vessel	1000 ml jars with stirrer pedals and baskets
Heater	1 KW
Power	230 V $\pm 10\%$, 50 Hz. AC

SALIENT FEATURES

- ✓ Complies with USP, IP specifications
- ✓ Extremely Useful for Pharmaceutical Labs
- ✓ Highly Accurate and Easy to Operate
- ✓ Programmable Stirrer Speed Control i.e. (25 – 200 RPM)
- ✓ 20 x 4 Line Alphanumeric LCD with Backlit
- ✓ 19 Soft Touch Membrane Type Keys
- ✓ USB Interface Available
- ✓ Three Programming Modes i.e. Routine, Sustain and Control
- ✓ 20 Independent Programmable Setups for Routine and Sustain
- ✓ Mode with Storage Facility
- ✓ 400 Samples Storage Facility
- ✓ Printer Attachment Facility
- ✓ Audio Visual Indicators for System Status
- ✓ Easy to Empty & Clean the Water bath with Bottom Drainage
- ✓ Continuation of Last Sample Run in case of Power Failure

STANDARD ACCESSORIES

Main Unit with Acrylic Tank and Rectangular Cover Plate and Water Bath Temperature Sensor (T1)
 Heater bath circulating pump
 External Temperature Sensor (T2) for Vessel
 Reaction Vessel capacity 1000 ml ((8 Nos.)
 Round Acrylic Cover Plate with Hole and a large slit(8 Nos.)
 S.S. Paddle, S.S Wire Mesh Basket (8 Nos.)
 Glass pipettes with rubber bellows
 Mains Lead
 Instruction Manual
 Dust Cover



731

MICROPROCESSOR

DISINTEGRATION TEST APPARATUS



TECHNICAL SPECIFICATIONS

Display	20x4 line alphanumeric LCD display with backlit
Keyboard	15 soft touch membrane keys
LED's	4 LED's available for different status indications. 3 LED's for Test status like Run, Alarm, End and one LED for heater on/off status.
Setup Data	Facility for 20 different test setups available
Printer	Provision for the attachment of dot-matrix printer with centronics parallel port interface
Speed	55 mm. 30 ± 1 strokes per minute
Resolution	1 Sec — 99 Minutes
Temp. Range	20°C — 50°C
Temp. Accuracy	$\pm 0.2^\circ\text{C}$
Temp. Control	Microprocessor based using PT100/Semiconductor Sensor
Reaction Beaker	1000 ml
Heater	0.4 KW (Approx.)
PC Connectivity	USB interface available
Power	230 V $\pm 10\%$ AC, 50 Hz
Dimensions	365 x 350 x 495 mm (L x B x H) (Approx.)
Weight	9 Kg (Approx.)

SALIENT FEATURES

- ✓ Complies with USP IP specifications
- ✓ Extremely useful for pharmaceutical labs
- ✓ Highly Accurate and Easy to Operate
- ✓ Baskets 'UP' & 'DOWN' movement as per IP/USP Specifications
- ✓ 20 x 4 Line Alphanumeric LCD with Backlit
- ✓ 15 Soft Touch Membrane Type Keys
- ✓ 20 Setups Storage Facility
- ✓ 400 Samples Storage Facility
- ✓ USB interface available.
- ✓ Audio Visual Indicators for System Status

STANDARD ACCESSORIES

External Temperature Sensor
Mains Lead
Instruction Manual
Dust Cover



74/73

DIGITAL

DISINTEGRATION TEST APPARATUS

TECHNICAL SPECIFICATIONS

Type of Heating	Hot Plate
Up-down Speed	30 ± 2 strokes/min
Up-down Length	55 ± 5 mm
Time Control	Digital (Programmable from 1 sec to 99hr, 59min, 59 sec)
Electric Motor	Low rpm A.C. Motor
No. of Basket	Two (One in Model 73)
Audio Alarm at completion	Yes
Hold & Resume Facility	Yes



SALIENT FEATURES

- ✓ Programmable Time With Digital Display
- ✓ Auto Stop After Completion Of Set Time With Alarm
- ✓ Memory For Protection Of Running Test In Case Of Power Failure
- ✓ Separate Regulator for Control Of Heating
- ✓ Facility For Hold And Resume The Running Test For Inspection of Sample

710

MICROPROCESSOR

FRIABILITY APPARATUS



TECHNICAL SPECIFICATIONS

Test Methods	Time and Count Mode
Speed of Drums	20 — 60 RPM \pm 0.5 RPM
No. of Drums	2
Display	20x4 Alphanumeric LCD
Keyboard	Soft touch membrane keys, alphanumeric mobile keypad
Counter	1 to 9999 rotations
Timer	1 sec to 9 hrs 59 min 59 sec
Type of Drive	Direct Drive with Stepper Motor
Printer	Parallel Printer
PC Connectivity	USB interface available
Storage	200 Sample reading with batch number, sample number
Electrical Supply	230 VAC \pm 10%, 50/60 Hz, 44VA
Dimensions (LxBxH)	335mm X 330mm X 340mm
Weight	12 Kgs

SALIENT FEATURES

- ✓ Complies with USP, IP specifications
- ✓ Microprocessor based, easy to use
- ✓ 20 x 4 line alphanumeric LCD display with backlit
- ✓ 16 Soft touch membrane type keys
- ✓ Independent programmable setups for Time & Count mode with storage
- ✓ Password-protected user access
- ✓ Facility to attach with weighing balance
- ✓ Automatically calculates percentage friability
- ✓ Loading and unloading of tablets without removing drums
- ✓ Power Failure detection facility
- ✓ User friendly operation with menus & current status indicators.
- ✓ USB interface available.



70/71

DIGITAL

FRIABILITY TEST APPARATUS

TECHNICAL SPECIFICATIONS

Rotation Speed	25 \pm 1
Time Range	1 sec to 99 min 59 sec
No Of Wheels	Two (One in Model 71)
Test Time Programmable	Programmable
Electric Motor	Low rpm A.C. Motor
Auto Removal of sample	Yes
Audio Alarm at completion	Yes



SALIENT FEATURES

- ✓ Programmable Time With Digital Display
- ✓ Auto Stop After Completion Of Set Time With Alarm
- ✓ Auto Removal of Sample Without Opening the Drum
- ✓ Precise Control of RPM 25 \pm 1



6710 MICROPROCESSOR

FLAME PHOTOMETERS
TOUCH SCREEN



TECHNICAL SPECIFICATIONS

RANGE		
General Range	Serum Range	Urine Range
ppm meq/l	meq/l	Na : 0-100 0-200 meq/l, 1:100 dil. 0-250
meq/l, 1:100 dil.		
K : 0-100	0-10 meq/l, 1:100 dil.	0-100 meq/l, 1:100 dil.
Ca : 0-100	0-10 meq/l, 1:2 dil.	
Li : 0-100	0-2 meq/l, 1:5 dil.	-
Ba : 30-3000	(all meq values are claimed with appropriate dilution)	
SENSITIVITY	General Mode : Na: 0.5 ppm, K: 0.5 ppm, Li: 0.5 ppm, Ca:15 ppm Ba: 30ppm	
FILTERS	Na & K Supplied (Ca, Li & Ba are optional at extra cost) {Factory Fitted Only}	
RESOLUTION	0.1 ppm / 0.1 meq.	
REPRODUCIBILITY	< 1% coefficient of variation for 20 consecutive samples using 10 ppm Na set as Maximum Standard up to 3% CV for 20 consecutive samples of Concentrations between 50 to 199 ppm for Barium.	
LINEARITY	< 2% error when 3 ppm Na/K and 5 ppm Li are set as Maximum Std.	
CURVE FIT ACCURACY	± 2% of FS	
DISPLAY	Colored Touch Screen	
AVERAGE TIME	In-built in Software	
FLAME SYSTEM	LPG & Dry Oil Free Air	
DETECTOR	Photodiode	
CALIBRATION	with up to 25 Standards of user choice with curve fitting software (5 for each Element). Multiple Calibration Curves can be stored in the memory	
GAS CONTROL	Adjustable with knob	
ASPIRATION TIME	3 ml per Minute	
FLAME FAILURE	Auto Detection	
GAS CUTOFF	Automatic	
IGNITION SYSTEM	Auto Ignition	
AUTOMISER	Axial Flow Type	
DIMENSIONS	Instrument : 365 x 245 x 220 mm Approx. (LxBxH)	
PRINTER	Provision for attachment of Dot-Matrix Printer with centronics parallel interface	
PC INTERFACE	USB	
WEIGHT	Main Unit : 8 Kg. (Approx.)	
POWER SUPPLY	230 V AC ± 10%, 50 Hz	

SALIENT FEATURES

- ✓ 7 inches colored touch screen
- ✓ Password protected data login facility
- ✓ Auto Gas Cutoff Facility
- ✓ Auto Flame Failure Detection Facility
- ✓ μ P Based With Printer Interface
- ✓ Five Element Measurement In Single Aspiration of the Sample
- ✓ Curve Calibration Programmability using Maximum of 25 Standards
- ✓ Data Processing Through Curve Fitting Techniques - Least Squares, Quadratic
- ✓ Multiple Calibration Curves Saving Facility
- ✓ Samples Data Storage Facility
- ✓ Printer Attachment Facility
- ✓ Measurement in ppm & meq
- ✓ Useful For Both Medical & Soil Testing Applications
- ✓ Setup Storage Facility up to 10 setups files

STANDARD ACCESSORIES

Air Compressor
Chimney
Sample Beakers
Manual
Air & Gas Tubing
USB Cable
Main Lead



671/672

MICROPROCESSOR

FLAME PHOTOMETERS



TECHNICAL SPECIFICATIONS

RANGE

General Range

ppm
Na : 0-100
K : 0-100
Ca : 0-100
Li : 0-100
Ba : 30-3000

Serum Range

meq/l
0-200 meq/l, 1:100 dil.
0-10 meq/l, 1:100 dil.
0-10 meq/l, 1:2 dil.
0-2 meq/l, 1:5 dil.
(all meq values are claimed with appropriate dilution)

Urine Range

meq/l
0-250 meq/l, 1:100 dil.
0-100 meq/l, 1:100 dil.

SENSITIVITY

General Mode : Na: 0.5 ppm, K: 0.5 ppm, Li: 0.5 ppm, Ca: 15 ppm Ba: 30ppm

FILTERS

Na & K Supplied (Ca, Li & Ba are optional at extra cost) & Factory Fitted only

RESOLUTION

0.1 ppm / 0.1 meq.

REPRODUCIBILITY

< 1% coefficient of variation for 20 consecutive samples using 10 ppm Na set as Maximum Standard up to 3% CV for 20 consecutive samples of Concentrations between 50 to 199 ppm for Barium.

LINEARITY

< 2% error when 3 ppm Na/K and 5 ppm Li are set as Maximum Std.

CURVE FIT ACCURACY

± 2% of FS

DISPLAY

128 x 64 Graphical LCD

AVERAGE TIME

In-built in Software

FLAME SYSTEM

LPG & Dry Oil Free Air

DETECTOR

Photodiode

CALIBRATION

With up to 25 Standards of user choice with curve fitting software (5 for each Element). Multiple Calibration Curves can be stored in the memory

ASPIRATION TIME

3 ml per Minute

GAS CONTROL

Adjustable with knob

FLAME FAILURE

Auto Detection

GAS CUTOFF

Automatic

IGNITION SYSTEM

Auto Ignition

AUTOMISER

Axial Flow Type

DIMENSIONS

Instrument : 365 x 245 x 220 mm Approx. (LxBxH)

PC INTERFACE

USB

WEIGHT

Main Unit : 8 Kg. (Approx.)

POWER SUPPLY

230 V AC ± 10%, 50 Hz

SALIENT FEATURES

- ✓ Auto Gas Cutoff Facility
- ✓ Auto Flame Failure Detection Facility
- ✓ Inbuilt Thermal Printer (In Model 672)
- ✓ μ P Based With Printer Interface
- ✓ Five Element Measurement In Single Aspiration of the Sample
- ✓ Curve Calibration Programmability using Maximum of 25 Standards
- ✓ Data Processing Through Curve Fitting Techniques - Least Squares, Quadratic
- ✓ Multiple Calibration Curves Saving Facility
- ✓ Samples Data Storage Facility
- ✓ Online Help Key
- ✓ Printer Attachment Facility
- ✓ Measurement in ppm & meq
- ✓ Useful For Both Medical & Soil Testing Applications
- ✓ Setup Storage Facility up to 10 setups files
- ✓ Supplied with Compressor Unit

STANDARD ACCESSORIES

Air Compressor
Chimney
Sample Beakers
Manual
Air & Gas Tubing
USB Cable
Main Lead



66/65 DIGITAL FLAME PHOTOMETERS



TECHNICAL SPECIFICATIONS

ACCURACY	$\pm 2\%$ up to 100 meq, $\pm 2\%$ up to 40 ppm $\pm 5\%$ above 100 meq, $\pm 5\%$ above 40 ppm
READOUT	Dual 2½ digit bright red LED displays in (Model LT-66)
IGNITION SYSTEM	In-built electronic Ignition by press of a knob
DIMENSIONS	375 X 245 X 220 mm (Approx.)
WEIGHT	8 Kg. (Approx.)
MEASUREMENT SYSTEM	Simultaneous measurement of 2 elements on dual LED display (Model 66 Only)
REPEATABILITY	± 2 Counts
DETECTOR	Silicon Photodiode
FILTERS	Narrow band interference glass filters (Na, K Filters are Supplied, Ca & Li filters are optional at extra cost)
NEBULIZER	Black bakelite, axial flow type
FLAME SYSTEM	LPG and dry oil free air
WARM UP TIME	10 minutes
COMPRESSOR UNIT	Supplied along with the instrument
POWER	230V $\pm 10\%$ AC, 50Hz

SALIENT FEATURES

- ✓ Dual Channel in Model LT-66
- ✓ Stainless steel round burner
- ✓ Concentric Non-Corrosive Nebulizer
- ✓ Narrow Band interface Filters
- ✓ Dual 2½ digit red LED display
- ✓ Highly Stable & Accurate

STANDARD ACCESSORIES

Air Compressor
Chimney
Sample Beakers
Manual
Air & Gas Tubing
Main Lead



6310 MICROPROCESSOR



KARL FISCHER MOISTURE TITRATOR
TOUCH SCREEN



TECHNICAL SPECIFICATIONS

Measuring Range	10 ppm to 100 % of moisture
Measuring Method	Karl Fischer Volumetric Titration Method
K.F. Dispensing System	Highly sensitive motorized dispensing system
Resolution of Titrant Volume	0.01 ml
Indication of Titrant Volume	0.00 to 99.99 ml
Auto Moisture content Calculation	%0.01 to 100%, 10 to 999999 ppm, 0.00 to 999.99 mg H ₂ O
Calibration	Auto K.F. Titer/Factor calculation
End Point Indication	Audio
Wait Time for End Point	Adjustable 1 to 99 seconds
Display	7" Colored Touch Screen
Storage	Sample result & setup data storage facility
Clock	In built clock with date & time display
Stirrer	In built magnetic stirrer with adjustable speed
Reagent Bottles	250 ml bottles for KF Reagent, methanol & calcium chloride
Printer Interface	Dot matrix printer interface
Power Supply	12V/2A DC Supply

SALIENT FEATURES

- ✓ 7 inches colored touch screen
- ✓ Password protected data login facility
- ✓ Microprocessor Based with Printer Interface
- ✓ User Friendly and Menu Driven Software.
- ✓ Direct Results in ppm, % and mg H₂O on single display screen
- ✓ Setup Data Storage Facility
- ✓ Sample Data Storage Facility
- ✓ Batch-Wise, Date-Wise and Individual Result Data Printing
- ✓ RS232/USB Interface (Optional)

STANDARD ACCESSORIES

Dual Platinum Electrode
Teflon Coated Magnetic Stirring Capsule
250 ml Bottle for K.F. Reagent
250 ml Bottle for Methanol
250 ml Bottle for Calcium Chloride
Reagent Outer
25 µl Auto pipette
Adapter for Calcium Chloride Bottle
Adapter for K.F. reagent Bottle
Set of connecting tubes
Set of dispensing tubes & nozzles
Titration Vessel
Power supply Adapter
Rubber bellow
Instruction Manual



630

MICROPROCESSOR

KARL FISCHER MOISTURE TITRATOR



TECHNICAL SPECIFICATIONS

Measuring Range	10 ppm to 100 % of moisture
Measuring Method	Karl Fischer Volumetric Titration Method
K.F. Dispensing System	Highly sensitive motorized dispensing system
Resolution of Titrant Volume	0.01 ml
Indication of Titrant Volume	0.00 to 99.99 ml
Auto Moisture content Calculation	%0.01 to 100%, 10 to 999999 ppm, 0.00 to 999.99 mg H ₂ O
Calibration	Auto K.F. Titer/Factor calculation
End Point Indication	Audio
Wait Time for End Point	Adjustable 1 to 99 seconds
Keypad	20 keys
Display	128 x 64 Graphical LCD
Storage	Sample result & setup data storage facility
Clock	In built clock with date & time display
Stirrer	In built magnetic stirrer with adjustable speed
Reagent Bottles	250 ml bottles for KF Reagent, methanol & calcium chloride
Printer Interface	USB Interface
Power Supply	12V/2A DC/230V A.C Supply

SALIENT FEATURES

- ✓ Microprocessor Based with Printer Interface
- ✓ User Friendly and Menu Driven Software.
- ✓ Direct Results in ppm, % and mg H₂O on single display screen
- ✓ Setup Data Storage Facility
- ✓ Sample Data Storage Facility
- ✓ 128 x 64 Graphical LCD
- ✓ Batch-Wise, Date-Wise and Individual Result Data Printing
- ✓ USB Interface available
- ✓ Parallel Printer Port available

STANDARD ACCESSORIES

Dual Platinum Electrode
 Teflon Coated Magnetic Stirring Capsule
 250 ml Bottle for K.F. Reagent
 250 ml Bottle for Methanol
 250 ml Bottle for Calcium Chloride
 25 µl Auto pipette
 Adapter for Calcium Chloride Bottle
 Adapter for K.F. reagent Bottle
 Set of connecting tubes
 Set of dispensing tubes & nozzles
 Titration Vessel
 Power supply Adapter
 Rubber bellow
 Instruction Manual
 Dust cover



63 AUTO

KARL FISCHER TITRIMETER

TECHNICAL SPECIFICATIONS

DISPLAY	Array of 10 LED'S
SAMPLE SIZE	1-50mg of H ₂ O
INDICATION	RUN, ADD, END LED's
KF FLOW	Auto Control Valve
BURETTE	Auto Zero 10ml Burette
TIMER	Adjustable Timer
DISPENSING RESOLUTION	0.05ml
MEASURING ELECTRODE	Dual Platinum KF Electrode
POWER	230 V \pm 10%, 50 Hz. AC



STANDARD ACCESSORIES

Auto Titration Control
Auto Zero Burette
Adjustable Timer
Visual & Audible Alarm



37/36 MICROPROCESSOR

COLONY COUNTERS

TECHNICAL SPECIFICATIONS

DISPLAY	3 - Digit Seven Segment LED in Model LT-36 4 - Digit Seven Segment LED in Model LT-37
MAX COUNT	999 in Model LT-36, 9999 in Model LT- 37
KEYBOARD	6 soft touch membrane keys
CORRECTION	Count correction facility available to cancel the unwanted counts
STORAGE	125 Result-count storage retained even if the system is switched off
AVERAGE	Average mode facility available
DISH SIZE	110 mm
MAGNIFICATION	x 1.7 surface magnification
DIMENSIONS (L x B x H)	255 x 220 x 100 mm (Approx.)
WEIGHT	3 Kg. (Approx.)
POWER	230 V \pm 10% AC, 50 Hz



SALIENT FEATURES

- ✓ Count Correction Facility
- ✓ Result-Count Storage
- ✓ Audible Confirmation of Each Count
- ✓ Auto Marker Pen
- ✓ Uniform Glare Free Illumination
- ✓ Wolffhugel Glass Grid with Focussing Facility
- ✓ LED Based Illumination



21

DIFFERENTIAL

BLOOD CELL COUNTER



TECHNICAL SPECIFICATIONS

CELL COUNTING KEY	16 Keys
TOTAL KEYS	16 Keys (8 Cell keys and 3 Function keys)
BODY	Metal Body
DISPLAY	16x2 Line LCD Display
MAINS INPUT	230V \pm 10% AC, 50 Hz
WEIGHT	1.5 kg (Approx.)
DIMENSIONS	250 x 230 x 150 mm (LxBxH)

SALIENT FEATURES

- ✓ Facility to count 8 Types of Cells
- ✓ 16x2 Line Alphanumeric LCD Display
- ✓ Automatic percentage (%) calculation
- ✓ Individual cells counting facility
- ✓ In-built Stop Watch and Timer function
- ✓ Audible beep facility



43

BLOOD

ROLLER MIXER



TECHNICAL SPECIFICATIONS

ROLLER SIZE	230mm
CONTROLS	Analog
NO. OF ROLLERS	4
SPEED	33rpm (Approx.)
MAXIMUM LOAD	5 test tubes
TIMER	No
POWER SUPPLY	230V \pm 10% AC 50Hz.

SALIENT FEATURES

- ✓ Rocking and rolling action for complete Mixing
- ✓ Four roller design with small footprint
- ✓ Designed for continuous quiet operation
- ✓ Ambient temperature range +4°C to +60°C



108 MICROPROCESSOR

MELTING/BOILING POINT APPARATUS
WITH HD CAMERA & 7" LED



TECHNICAL SPECIFICATIONS

Display	128x64 Graphical LCD & 7" LED HD Display
Temperature	0 to 300°C
Temperature Resolution	0.1°C
Calibration	Using Software
Amount of Sample	Fine powder properly dried at a temperature considerably below its melting point 4 to 6mm high
Oil Bath	Silicon Oil-bath beaker 200 ml capacity with Teflon cover fitted with oil immersion heater and having three holes for holding the capillaries, one for boiling point tube and one for temperature sensor
Power	230 ± 10% VAC 50 Hz
Storage	1000 Samples result with date, time, sample number and batch number
Data Output	Through USB Port
Sample Display	Facility to display stored sample results
Batch	Facility to enter batch number while storing sample results
Stirrer	On/OFF using key
Stirrer Speed	Controllable using stirrer keys
Stirrer Indication	Stirrer On Icon appears on the screen when the stirrer is ON. When it is off, no icon comes
Modes	Three heating Modes-Slow Mode, Normal Mode and Rapid Mode
Sample Type	Selection for samples whose melting point is known or whose melting point is not known
Camera	HD camera to view capillaries
Display	7" LED HD Display

STANDARD ACCESSORIES

Capillaries	1 Box.
Capillaries	1 Box.
Silicon Oil	1 Bottle
Main Lead	
USB Cable	
Software CD	



109

MICROPROCESSOR

MELTING POINT APPARATUS



TECHNICAL SPECIFICATIONS

No. of samples	1 sample at a time
Temperature Range	Ambient to 300°C
Temperature Accuracy	± 1°C at 200°C & ±2.5°C at 275°C
Temperature Sensor	Platinum Resistance PT100
Selectable heating modes	Slow, Medium and Rapid
Display	128x64 Graphical LCD Display
No of keys	4
Memory	Storage upto 1000 results
Power	230 V AC +10%, 50 Hz

SALIENT FEATURES

- ✓ 128x64 Graphical LCD display with backlight
- ✓ Icon-based navigation menu for ease of operation
- ✓ Selectable heating modes (slow, medium and Rapid)
- ✓ Storage up to 1000 results
- ✓ Quick Cooling with Integrated fans
- ✓ Audio and Visual Indicators for System Status
- ✓ Quick Cooling with integrated Fans

STANDARD ACCESSORIES

Capillaries	1 Box
Cleaning tool	1 Nos.
USB Cable	1 Nos.
Software CD	1 Nos.



115

DIGITAL

MELTING POINT APPARATUS SILICON OIL BASED



TECHNICAL SPECIFICATIONS

DISPLAY	4 Digit Seven Segment LED display
TEMPERATURE	Ambient to 275°C
RESOLUTION	1°C
CAPILLARY GLASS TUBE	100mm long, 0.8 to 1.1 mm Internal diameter
BOILING POINT	6x75mm glass tube
SAMPLE SIZE	Fine powder properly dried
OIL-BATH	Silicon oil bath beaker - 200 ml capacity with Teflon cover fitted with oil immersion heater. It is having three holes for holding the capillaries, one for boiling point tube and one for thermometer
STIRRER SPEED POWER	Controllable with front knob
POWER	230V ± 10% AC, 50 Hz
WEIGHT	6 Kg. (Approx.)

STANDARD ACCESSORIES

- Box of Capillaries
- Glass Tubes for Liquid Sample (6 x 75 mm) 2 Nos.
- Magnetic Capsule
- Bottle of Silicon Oil - 250 ml
- Glass Cylindrical Beaker with Teflon cover fitted with immersion heater
- Instruction Manual, Dust Cover



780

DIGITAL TABLET

HARDNESS TESTER



TECHNICAL SPECIFICATIONS

Display	LCD with backlit display
Keyboard	User Friendly 9 Keys operations
Hardness Range	5-500 N
Hardness Accuracy	±0.05% FS
Measuring Units	N(Newton), KGF (Kilogram Force) and Lbf (Low bound Force)
Interface Ports	RS-232
Dimensions	360 x 65 x 100 mm
Electrical Power Adapter	230 V, 50Hz to DC 12V, 300 mA
Battery	1200 mAh, 8.4V, Ni-Hi Rechargeable Battery
Peak Force Measurement:	Yes
Acrylic Safety Glass Cover	Yes
Stored Results	Upto 10 (also calculate the average value of test results)
Tablet Size	Yes (2mm to 28 mm)



77

DIGITAL BULK

DENSITY APPARATUS



TECHNICAL SPECIFICATIONS

Maximum Counts	9999
Display	4 Digit 7-Segment Red LED
Keyboard	6 Soft Touch Membrane Keys
Cylinder	2 Nos., 50/100 ml Cylinders
Drop Height	25 mm (Approx.)
Power	230 V ± 10% AC, 50 Hz.
Dimensions	600 x 450 x 200 mm (Approx.)
Weight	12 Kg (approx.)
Accessories	50 ml Cylinders — 2 Nos., Instruction Manual & Dust Cover

SALIENT FEATURES

- ✓ Extremely useful for Pharmaceutical Lab
- ✓ Highly Accurate and Easy to Operate
- ✓ Microcontroller Based Digital Display
- ✓ Soft Touch Membrane Keys
- ✓ 3 LED's for status Indication
- ✓ Audible Alarm Sound
- ✓ Last Count Retention on Power Failure



75

DIGITAL

LEAK TEST APPARATUS

TECHNICAL SPECIFICATIONS

Type	GMP Model, In-built Test Unit
Time Control & Range	Digital, Programmable, 00.01 sec to 99min 59sec
Test Vacuum Range	Adjustable up-to 650 mmHg
Vacuum Display	2.5" SS Vacuum Gauge
Vacuum Control & Release	By Single Front Panel Knob
Audio Alarm at completion	Yes
Vacuum Pump	Oil free, MV 27" \pm 5%, 1/4HP Motor
Test Unit Size	200mm, 250mm & 300mm (any one) (Specify in Order)



SALIENT FEATURES

- Programmable Time With Digital Display
- Auto Stop After Completion Of Set Time With Alarm
- Precise Control of Vacuum
- Heavy Duty Oil-free Vacuum Pump
- 1mm Thick SS-304 cabinet



76

DIGITAL

MOISTURE BALANCE

TECHNICAL SPECIFICATIONS

Weighing Range	50g
Readability	1mg
Repeatability (3g samples)	0.20%
Minimum Sample Amount	0.5g
Advised Sample Amount	3-10g
Heat up time	1-99minutes, 1 minute Interval
Temperature Program	Standard
Terminal Control	Timing, Automatic
Heating Temperature Range	50-180°C
Showing Content	Moisture%, Solid%, Weight, Time, Data etc
Heating Source	Halogen Lamp
Pan Size	100mm
Dimension	265x160x150mm
Net Weight	5Kgs
Packages Size	530x380x340mm
Gross Weight	6kgs



SALIENT FEATURES

- ✓ Window matrix liquid crystal display (LCD)
- ✓ High precision heat insulation.
- ✓ Automatic peeling function.
- ✓ Halogen drying method
- ✓ Highly accurate & stable

STANDARD ACCESSORIES

- Calibration Weight
- Weight Plier
- Scale Plier Pan
- Pan Support
- Power Cable



7510

AUTOMATIC POLARIMETER

TOUCH SCREEN



TECHNICAL SPECIFICATIONS

4 Test modes	Optical rotation, specific rotation, sugar degree and concentration
Light source	LED
Measurement range	$\pm 45^\circ$ (optical rotation) $\pm 120^\circ$ Z(sugar)
Wavelength	589.3nm
Minimum indicating value	0.001° (optical rotation)
Accuracy	a) $\pm 0.01^\circ$ ($-15^\circ < \text{optical rotation} < +15^\circ$) b) $\pm 0.02^\circ$ (optical rotation $< -15^\circ$ or optical rotation $> +15^\circ$)
	Repeatability 0.002° (optical rotation)
Display	Color Touch Screen
Test tube	200mm, 100mm
Sample transmittance	$> 1\%$
Interface	USB & RS232
Operation voltage	$220V \pm 22V$, 50Hz
Overall Dimensions	850mm x 500mm x 470mm
Weight(Gross)	38kg
Software	Yes

SALIENT FEATURES

- ✓ Touch Screen Colour Display
- ✓ Temperature Display
- ✓ Measurement of dark-colored sample
- ✓ USB & RS232
- ✓ No warm-up time is required when instrument is switched on
- ✓ Insulated Sample chamber to keep sample temp. constant
- ✓ Photodiode Detector



750

DIGITAL

AUTOMATIC POLARIMETER



TECHNICAL SPECIFICATIONS

Test modes	Optical rotation, sugar degree
Light source	LED
Wavelength	589.44nm
Measurement	$\pm 45^\circ$ (optical rotation) & $\pm 120^\circ$ Z (sugar)
Minimum indicating value	0.001° (optical rotation) 0.01° Z (sugar)
Accuracy	$\pm (0.01 + \text{measurement value} \times 0.05\%)^\circ$ Z (optical rotation) $\pm (0.03 + \text{measurement value} \times 0.05\%)^\circ$ Z (sugar)
Repeatability	$< 0.002^\circ$ (optical rotation)
Display	LCD
Test tube	200mm, 100mm
Sample transmittance	$> 1\%$
Interface	RS232
Operation voltage	$220 \pm 22V$, 50Hz
Overall dimensions	730mm X 480mm X 470mm
Weight (gross)	36kgs
Software	Yes

STANDARD ACCESSORIES

Sample tubes 100mm, 200mm
 Software kit: RS232 cable, software CD
 Main lead
 Fuse
 Instruction manual.



740 DIGITAL

AUTOMATIC POLARIMETER

TECHNICAL SPECIFICATIONS

Measuring Range	$\pm 200^\circ$ (Sugar Scale) & $\pm 70^\circ$ (optical rotation)
Accuracy	$\pm 2\%$ (Full Scale)
Resolution	0.01°
Display	Graphical LCD (128 x 64)
Keys	4-Keys for Menu Operation
Calibration Mode	2 Point (zero & span)
Interface	USB
RTC	In-built clock with date and time display
Data Storage capacity	1000 Logs with Date & Time
Power Supply	230VAC $\pm 10\%$, 50Hz



SALIENT FEATURES

- ✓ Micro processor Based
- ✓ User Friendly and menu driven software
- ✓ 128 x 64 Graphical LCD
- ✓ Two point calibration.
- ✓ USB Interface
- ✓ USB Port for interfacing the system with PC.
- ✓ One can see the stored logs on the system before printing
- ✓ Internal storage capacity of 1000 logs with date and time



738 DIGITAL

ABBE REFRACTOMETER

TECHNICAL SPECIFICATIONS

MEASURING MODES	1. Refractive Index 2. Brix of sugar solution 3. Brix TC of sugar solution 4. Automatic detect Temp. shown in display
Measurement range	nD1.30000- 1.70000 Brix:0-100%
Measuring Accuracy	nD ± 0.0002 Brix $\pm 0.1\%$
Measuring Resolution	(nD) ± 0.0001
Temperature Range	
(Min. 0.1° C)	0-50° C
Weight (Gross)	12kg
Overall Dimensions	370mm x 240mm x 470mm



SALIENT FEATURES

- ✓ Measurement of refractive index nD of transparent or translucent liquid and solid substances.
- ✓ Measurement of the Brix of sugar solution.
- ✓ Visual aim and LCD display.
- ✓ Automatic correction of the effect of temperature on the Brix.
- ✓ Prism made of hard glass.
- ✓ RS 232

STANDARD ACCESSORIES

- 1 Calibration standard,
- 1 Hex key,
- 3 lamps 6.3V. 0.25 A.
- 3 fuses 1 A.
- 1 RS-232 Cable
- 1 Software CD Manual
- 1 Main Lead
- 1 Operating Manual
- 1 Dust cover



7310

DIGITAL VISCOMETER

TOUCH SCREEN



TECHNICAL SPECIFICATIONS

Measuring Range(mPa.s)	20-2,000,000(mPa.s)
RPM	0.3, 0.6, 1.5, 3, 6, 12, 30, 60
No of Standard Spindles	#1,#2,#3,#4 is standard configuration,
Measurement Accuracy :	± 1.0% of range
Repeatability	± 0.5%
Display	LCD Touch Screen
Temperature RTD Monitoring	
Sensor Probe :	Yes
Output	RS 232 Interface
Power Supply	AC 220V/50Hz
Dimension LxWxH (mm)	400 x 350 x 360
Weight	9 Kg

SALIENT FEATURES

- ✓ Stepping Motor means Accurate, reliable operation
- ✓ Direct readout of all measurement parameters
- ✓ Auto Range Showing
- ✓ Time Function for measurement
- ✓ Sound alarm at under 20% Torque
- ✓ Linear calibration
- ✓ Wide range power supply:100V-240V

STANDARD ACCESSORIES

Ascending and falling rack	1 set
Protective frame of rotor	1 No.
Rotors	(No.1,2,3,4 each)
Power adapter	1 No.
Spanner	1 No.
Screw driver	1 No.
Socket	1 set



730

DIGITAL

VISCOMETER

TECHNICAL SPECIFICATIONS

Display	LCD
Measurement Range	20-400,000 mPAS/C.P
Spindle numbers	4 Spindles
Rotor Speed (rpm)	6/ 12/30/60
Accuracy	± 5% Newtonian Fluid
Overall Dimensions	340mm x 420mm x 470mm
Net Weight	9kg

STANDARD ACCESSORIES

Ascending and falling rack	1 set
Protective frame of rotor	1 No.
Power adapter	1 No.
Rotors	1,2,3,4 each
Spanner	1 No.
Screw driver	1 No.
Socket	1 set



2410 PCR



GRADIENT THERMAL PCR CYCLER
TOUCH SCREEN

TECHNICAL SPECIFICATIONS

Block Formats	96x0.2ml
Temp Range	0°C-99.9°C
Display	7 Inches Colored Touch Screen
Max Heating Ramp Rate	5.0°C/s
Max. Cooling Ramp Rate	5.0°C/s
Heating/Cooling adjustable rate:	0.1°C/s-4.0°C/s
Uniformity	≤ ±0.2°C
Accuracy	≤ ±0.1°C
Gradient Temp Range	30-99°C
Thermal Gradient Span	1-30°C
Gradient Uniformity	≤ 0.2°(single row)
Hot Lid Temp	20-110°C
Temp Control Mode	Block, Tube
Memory Capacity	2000**
Max. No. of Cycle	999
Communication	USB 2.0/RS 232/RJ45
Intelligent Diagnosis	108
Size(WxDxH,mm) Weight(kg)	380x270x250

240 PCR

THERMAL CYCLER

TECHNICAL SPECIFICATIONS

Block capacity	64 x 0.2ml
Temp range	4°C — 99°C
Max Heating rate	< 2.5°C/s
Max cooling rate	< 2.5°C/s
Temperature display accuracy	0.1 °C
Accuracy	< ± 2.5°C/s
Temperature fluctuation	< ± 0.1 °C
Uniformity	95 °C h < ± 0.5 °C (20 seconds later) 20 °C — 72 °C h < ± 0.3 °C (20 Seconds Later)
Max program unit	9
Max Cycle steps	9
Max Cycle No	99
Max Constant temperature	59m59s
Stored program No	99h59m
Stored program No	100
Dimensions	370mm (L) x 249mm (W) x 180mm (H)
Weight	5 kg



SALIENT FEATURES

- ✓ Convenient and flexible module replacement modular.
- ✓ Large size super-high-definition LCD screen.
- ✓ Intuitive, user friendly interface makes program easier and faster.
- ✓ Memory function in case of power down
- ✓ Low noise, low energy consumption, long service life.
- ✓ Solemn, elegant appearance, innovative design.
- ✓ Adjustable hot lid prevents reagents from evaporating.
- ✓ Optimal panel keypad design for convenient operation.
- ✓ Heated lid could be positioned at any angle.
- ✓ Handle-module, more secure and convenient for module replacement, improving interchanging efficiency and long life span.



SALIENT FEATURES

- ✓ Adjustable pressure hot lid,
- ✓ Heat lid with pressure alarm device,
- ✓ Convenient and flexible module
- ✓ Innovative module wire socket design achieves module replacement without wire.
- ✓ The unique left-right design for amplification area and operating area.
- ✓ Coloured and Wide Screen displaying Multiple details.
- ✓ Perform 20000 times non-breakdown operation.



3101

BIO-NANO

SPECTROPHOTOMETER
TOUCH SCREEN

TECHNICAL SPECIFICATIONS

Wavelength Range	200-800nm
Minimum Sample Size	0.5-2 μ l
Path Length	0.2mm (High concentration) 1.0mm (Ordinary concentration)
Light Source	Xenon flash lamp
Detector Type	2048 element linear silicon CCD array
Wavelength Accuracy	1 nm
Spectral Resolution	\leq 3nm
Absorbance Precision	0.003 Abs
Absorbance Accuracy	1% (7.332 Abs at 260nm)
Absorbance Range	0.02- 100A
Detects Nucleic Acid up to	2-5000ng/ul(ds DNA)
Measurement Time	<5S
Data Output	USB
Sample pedestal Material	Aluminum alloy and quartz fiber
Operating Voltage	24V DC
Operating Power Consumption	25W
Standby Power Consumption	5W
Dimension (W x D x H)mm	210x280x181
Weight	3.6kg
Software Compatibility	Android System OD 600NM Measurement
Light source	LED
Wavelength range	600 \pm 8nm
Absorbance range	0-4A

3100

BIO-NANO

SPECTROPHOTOMETER

TECHNICAL SPECIFICATIONS

Wavelength Range	200 - 800nm
Minimum Sample Size	0.5 μ -2 μ l (2 μ l advised)
Path Length	0.2mm or 1mm
Light Source / Life	Xenon flash lamp / > 109 flashes
Detector Type	3864 element linear silicon CCD array
Wavelength Accuracy	\pm 1 nm (TWHM at Hg 253.7nm)
Spectral Resolution	\leq 3nm (FWHM@Hg 253.7nm)
Absorbance Precision	0.003Abs (1mm path length)
Absorbance Accuracy	\pm 1% (7.332Abs, at 260nm wavelength)
Absorbance Range	0.04 - 90 (at 260 wavelength, 10mm equivalent)
Detection Concentration Range	2ng/ul dsDNA ~ 4,500ng/ul dsDNA
Detection Time	<8 Seconds
Input Voltage	DC24V 2A
Power	20W
Dimension (WxDxH)	200x250x166mm μ



STANDARD ACCESSORIES

Micro spectrophotometer
Setup CD
Adapter
USB cable
Operation manual



STANDARD ACCESSORIES

Micro Spectrophotometer	1Pc
Setup CD	1Pc
Adapter	1Pc
USB Cable	1Pc
Operation manual	1Pc



1160

AUTOMATIC

BOMB CALORIMETER

TECHNICAL SPECIFICATIONS

Display	128 x 64 Graphical LCD
Keypad	20 keys
Temperature Resolution	0.01°C
Internal Memory	1000 logs with date and time
Interface	USB interface to PC
Printer	Inbuilt thermal printer
Time Clock	Real time clock with battery backup
Power supply	230V ± 10%/50Hz

STANDARD ACCESSORIES

Standard Accessories

Steel drum	Safety valve for high pressure
Bomb with sample holder	Oxygen pressure gauge
Stirrer	Benzoic acid powder
Temperature probe	USB lead
Chrome wire	Toll kit
Pallet press	Operation manual
Cotton thread	Power supply cable (Main lead)



SALIENT FEATURES

- ✓ Automatic measurement & mathematical calculation
- ✓ USB interface for sending data to PC.
- ✓ Full test report print out by inbuilt thermal printer.
- ✓ Weight of sample, water equivalent & sensitivity can be set through keypad on single page.
- ✓ Automatic detection of temperature rise & fall.



160

DIGITAL

BOMB CALORIMETER



TECHNICAL SPECIFICATIONS

Display	3 Digit LED
Temperature accuracy	0.1°C
Temperature Resolution	0.1°C
Temperature Detector	RTD
Temp. Range	RT. to 99.9°C
Calculate	Manual
Power supply	230V ± 10%/50Hz

SALIENT FEATURES

- ✓ Manual measurement & calculation.
- ✓ Initial temperature rise & fall.



STANDARD ACCESSORIES

- Steel drum
- Bomb with sample holder
- Stirrer
- Temperature Probe
- Nichrome Wire
- Pallet press
- Cotton thread
- Safety valve for high pressure
- Oxygen pressure gauge
- Benzoic acid powder
- Tool kit
- Operation manual
- Power supply cable (Main lead)



3510 DIGITAL



PROBE SONICATOR

TECHNICAL SPECIFICATIONS

Rated power	250w
Input voltage	110V/220V-240v
Input frequency	50Hz-60Hz
Output power	≤250w
Frequency tracking	automatic tracking
Power and amplitude adjust	0-100%
Packing size(cm)	32 x 46 x 42cm
Machine weight(kg)	7
Sonotrode length	120mm
Sonotrode diameter	8mm
Sonotrode frequency	20KHz,
Operation panel display	time setting working data
Working mode	1s - 99 hours with pause function continuous working
Generator protection	Built-in circuit, Over loading, Over temperature, Antishort-circuit; Soft start
Cable length	2M
Environment Temp	0 - 40°C
Relative Humidity:	<=85% T=20°C
Max temperature of sonotrode	100°C
Max pressure	5Mpa
Treatment capacity of liquid	≤10 L/H
Breaker type for batch	20ml-200ml



STANDARD ACCESSORIES

An Abs Soundproof Box,
A Stainless Steel Lifting Platform,
3 Fuse



350 ULTRASONIC CLEANERS

TECHNICAL SPECIFICATIONS

Ultrasonic Frequency	40,000 Hz
Material	Stainless Steel SS304
Tank Capacity	2.0L, 3.5L & 4.5L, 6L
Timer	1-30 Minutes,
Digital timer	Power Supply AC 100 — 120V, 50 / 60Hz AC 220 — 240V, 50 / 60 Hz
Ultrasonic Power	240 W
Heating Power	200 W, Digital Heating
Unit Size	325 x 265 x 280 mm (L x W x H)
Tank Size	300 x 240 x 150 mm (L x W x H)
Package Size	430 x 365 x 420 mm (L x W x H)
N.W.	6.0 kg
G .VV.	7.0 kg



SALIENT FEATURES

- ✓ Stainless steel tank has resistance to wear and long work life.
- ✓ With digital timer & heater control.
- ✓ With Stainless steel basket
- ✓ Use just tap water, or industrial alcohol and solvent cleaner for more
- ✓ higher cleaning requirement
- ✓ Industrial control chip micro controller flexible circuit boards control
- ✓ More secure & stable
- ✓ Temperature tunable from 20°C to 80°C.



3201 HPLC SYSTEM



SPECIFICATIONS (PUMP)

Flow Range	0.001 — 9.999 ml/min
Delivery method	Double piston (Main & Auxiliary)
Pump head	10m1 SST/Peek analytical
Accuracy	$\pm 1\%$ or $\pm 2\mu\text{L}/\text{min}$, whichever is greater $\pm 1\%$ or $\pm 1\mu\text{L}/\text{min}$, whichever is greater (Micro)
Flow rate settings	0 - 0.10 mL/min. 0.001 inc. 0.10 - 0.90 mL/min 0.010 inc. 1.0 mL/min. + 0.10 inc
Precision	0.25% from 0.1 mL/min. to 10 mL/min. at 20° C 0.25% from 0.05 mL/min. to 4 mL/min. at 20° C (Micro)
Pmax	6000psi
System connections	1/16" capillaries
Dimensions	410mm x 180mm x 270mm
Weight	7.3kgs
Power input	230 V $\pm 10\%$ 50 Hz
Control	Stand alone mode using front panel

SALIENT FEATURES

- ✓ Self-priming pump head requires no manual priming
- ✓ Patented "Floating Pump Seal" designed for extended seal wear
- ✓ Available with micro, analytical, semi-prep, and prep pump heads
- ✓ Programmable solvent compressibility compensation
- ✓ Easy maintenance and service for all wetted parts
- ✓ Integral prime/purge assembly for quick solvent change

SPECIFICATIONS (UV DETECTOR)

Wavelength	190-700 nm
Spectral bandwidth	6 nm
Wavelength Accuracy	$\leq \pm 1$ nm
Wavelength Reproducibility	$\leq \pm 0.5$ nm
Flow pool volume	10 μL
Optical path	10 mm
Dynamic Noise	$\leq 2.5 \times 10^{-5}$ AU (Methanol, 1ml/min, 254nm)
Static Noise	$\leq \pm 1 < 10^{-5}$ AU (Empty pool, Response time 1 s)
Dynamic Drifting	$\leq \pm 2.5 \times 10^{-4}$ AU (Methanol, 1ml/min, 254nm)
Static Drifting	$\leq \pm 1 \times 10^{-4}$ AU (Empty pool, Response time 1 s)
Qualitative repeatability	RSD $\leq 0.1\%$
Quantitative repeatability	RSD $\leq 0.5\%$
Dimensions	160H x 260W x 350 D, (mm)
Weight	6 kg.
Minimum detection concentration	$\leq 1 \times 10^{-9}$ g/mL (Naphthalene/methanol solution)

STANDARD ACCESSORIES

Rheodyne Injector 7725 i (USA)
Micro Syringe
Column C-18
Software CD
Filters



5001

MICROPROCESSOR

TOUCH SCREEN pH METER 5 POINT CALIBRATION



TECHNICAL SPECIFICATIONS

pH Range	pH: -2.0 to 20.0, -2.00 to 20.00, -2.000 to 20.000; ± 2000 mV
pH Resolution	0.1, 0.01, 0.001 pH; 0.1, 0.01 mV
pH Accuracy	± 0.1 pH, ± 0.01 pH, ± 0.002 pH ± 1 LSD; ± 0.2 mV ± 1
pH Calibration	Automatic, up to five point calibration, (1.68, 4.01, 7.01, 9.18, 12.45)
Readout	5 inch high sensitive touch screen display
pH Temperature Compensation	Automatic or manual from -10.0 to 110.0 °C
Temperature Range	-10.0 to 110.0 °C, -4.0 to 248.0 °F;
Temperature Resolution	0.1 °C, 0.1 °F;
Temperature Accuracy	± 0.2 °C, ± 0.4 °F, ± 0.2 K
pH Electrode	Highly sensitive glass body pH electrode with BNC connector and 1 m (3.3') cable (included)
Temperature Probe	Stainless Steel temperature probe with 1 m (3.3') Cable (included)
Power Supply	12 VDC adapter (included)
Environment	0 to 50°C (32 to 122°F; 273 to 323 K), RH max 95% non-condensing
Dimensions	160 x 231 x 94 mm

SALIENT FEATURES

- ✓ 5 Inch touch screen with high resolution and sensitivity,
- ✓ Password protected data login facility.
- ✓ Measure pH, ORP and Temperature.
- ✓ Auto buffer recognition facility.
- ✓ Auto sensor check facility.
- ✓ 5 point calibration facility.
- ✓ Next calibration alarm with date.
- ✓ Meet GLP norms.
- ✓ PC attachment through USB.
- ✓ 1000 data storing facility with file name.



501

MICROPROCESSOR

pH METER 5 POINT CALIBRATION

TECHNICAL SPECIFICATIONS

pH	
RANGE	-2.000 to 20.000 pH
RESOLUTION	Selectable 0.1, 0.01, 0.001 pH
ACCURACY	± 0.002 pH ± 1 digit
READ OUT	128 x 64 dots Graphical LCD Display
CALIBRATION	Auto & Manual with 5-Point Calibration
AUTO BUFFER RECOGNITION	1.680, 4.000, 7.000, 9.200 & 12.450 pH or User Defined
RELATIVE STABILITY	± 0.002 pH/Hour
TEMP. COMPENSATION	-5 to 110 °C Auto/Manual
mV	
RANGE	0 to ± 1999.9 mV
RESOLUTION	0.1 mV & 0.01mV
ACCURACY	± 0.1 mV ± 1 digit Temperature
RANGE	-5 to 110 °C
RESOLUTION	0.1 °C
ACCURACY	± 0.1 °C
SENSOR	Semi Conductor Type
POWER SUPPLY	230V $\pm 10\%$ AC
PRINTER INTERFACE	External Serial RS232 Dot Matrix Printer Interface
ACCESSORIES	Combination pH Electrode, Temperature Probe, Buffer Tablets 4 pH & 7pH, Electrode Stand,



SALIENT FEATURES

- ✓ Measures pH, mV and Temperature
- ✓ 5 Point Calibration
- ✓ 128 x 64 dots Graphical LCD Display
- ✓ Auto Buffer Recognition Facility
- ✓ Storage up to 1000 Samples
- ✓ PC Attachment through USB



LABTRONICS®
Always a step ahead in technology...

50

MICROPROCESSOR

pH METER

5 POINT CALIBRATION

TECHNICAL SPECIFICATIONS

PARAMETER	pH	mV	Temp°C
RANGE	0.00 to 14.00 pH	0 to 1999.9 mV	0 to 100°C
RESOLUTION	0.01pH	0.1 mV	0.1°C
ACCURACY	±0.01 pH ±1 digit	±0.1mV	±0.1°C
TEMP. COMPENSATION	-5 to 110 °C		
CALIBRATION	Auto/Manual		
AUTO BUFFER	4.00, 7.00 & 9.20 pH		
READ OUT	128 x 64 dots Graphical LCD Display		
STORAGE	Up to 1000 Samples		
PC ATTACHMENT	Through USB		
KEY BOARD	5 Keys Soft Touch Membrane Type		
POWER	230±10% AC		
WEIGHT	0.8 Kg. (Approx.)		



SALIENT FEATURES

- ✓ Measures pH, mV and Temperature
- ✓ 5 Point Calibration
- ✓ 128 x 64 dots Graphical LCD Display
- ✓ Auto-Buffer Recognition Facility
- ✓ Storage up to 1000 Samples
- ✓ PC Attachment through USB



49

MICROPROCESSOR

pH METER

5 POINT CALIBRATION

TECHNICAL SPECIFICATIONS

PARAMETER	pH	mV	Temp°C
RANGE	0.00 to 14.00 pH	0 to 1999.9 mV	0 to 100°C
RESOLUTION	0.01pH	0.1 mV	0.1°C
ACCURACY	±0.01 pH ±1 digit	±0.1mV	±0.1°C
TEMP. COMPENSATION	-5 to 110 °C		
CALIBRATION	Auto/Manual		
AUTO BUFFER	4.00, 7.00 & 9.20 pH		
RECOGNITION			
READ OUT	16X2 LCD Display		
STORAGE	Up to 1000 Samples		
PC ATTACHMENT	Through USB		
KEY BOARD	8 Keys Soft Touch Membrane Type		
POWER	230±10% AC		
WEIGHT	0.8 Kg. (Approx.)		



10/11 DIGITAL pH METERS

TECHNICAL SPECIFICATIONS

PARAMETER	pH	mV
RANGE	0 to 14.00 pH	0 to ± 1999 mV
RESOLUTION	0.01 pH	1 mV
ACCURACY	± 0.01 pH	± 1 mV
DISPLAY	3½ Digit LED	
TEMP. COMPENSATION	Manual : 0 to 100 °C (ATC in Model LT-10)	
INPUT IMPEDANCE	$> 10^{12}$ ohms	
SLOPE CONTROL	80 to 120%	
RECORDER OUTPUT	0 to 10 mV/pH Adjustable 0 to 10 mV/100 mV Adjustable	
POWER	230 V $\pm 10\%$ AC, 50Hz	
DIMENSIONS	275 x 175 x 76 mm (L x B x H)	
SENSOR	Combined pH Electrode	
ACCESSORIES	pH electrode, Temp. probe (in model Lt10) electrode stand Dust Cover & Manual	



23 DIGITAL PH-COND. CUM TEMPERATURE METER

TECHNICAL SPECIFICATIONS

pH MEASUREMENTS	
pH	0 to 14 pH
Resolution	0.01 pH
Accuracy	± 0.01 pH + 1 digit
CONDUCTIVITY METER	
Range	0 to 2 & 20mMhos/cm
Accuracy	0.5% + 1 digit
TEMPERATURE MEASUREMENT	
Range	0 ° to 100 ° C
Resolution	0.1 ° C
Accuracy	0.2 % ± 1 digit
GENERAL SPECIFICATIONS	
Display	3½ digit LED display with automatic polarity & decimal point indication.
Power	230 V + 10% AC 50 Hz
Dimension	75X275X175 mm
Weight	2¼ Kgs. (Approx.)



5100 MICROPROCESSOR

COND-TDS-SAL METER
TOUCH SCREEN



TECHNICAL SPECIFICATIONS

PARAMETER	EC	TDS	SALINITY	TEMP.
RANGE SEL.	Automatic	Automatic	Automatic	—
RANGE	0-20, 0-200mS	0-2, 0-20, 0-200ppm	0-20, 0-200ppm	0-100°C
ACCURACY	0-2, 0-20, 0-200mS	0-20, 0-200 ppt	0-2, 0-20, 0-50ppt	± 0.1°C
RESOLUTION	± 0.5%FS±1Digit	± 0.5%FS±1Digit	± 1% FS± 1Digit	0.1°C
CELL CONST	0.01 mS	0.01 ppm	0.01 ppm	----
TEMP. COMP	Adjustable (0.05-9.99)	Adjustable (0.05-9.99)	Adjustable (0.05-9.99)	----
TEMP. COEFF.	Auto/Manual 0-50°C	Auto/Manual 0-50°C	Auto/Manual 0-50°C	----
DISPLAY	Adjustable (0.1 - 4.0%)	Adjustable (0.1 - 4.0%)	Adjustable (0.1 - 4.0%)	
PRINTER	5 inches Colored Touch Screen			
STORAGE	USB Interface			
POWER	Up to 1000 Samples			
ACCESSORIES	230V ± 10% AC			
	Cond./TDS/Salinity Cell, Temperature Probe, Electrode Stand, Mains Lead, Dust Cover, Instruction Manual			

SALIENT FEATURES

- ✓ 5 inches Colored Touch Screen
- ✓ Password protected data login facility
- ✓ EC, TDS, Salinity & Temperature Measurements
- ✓ Auto Temperature Compensation
- ✓ Auto Ranging Facility
- ✓ Programmable Ref. Temp & Temp. Coeff in EC Mode
- ✓ 1000 Samples Storage Facility
- ✓ Printer Attachment Facility



51 MICROPROCESSOR

COND-TDS-SAL METER

TECHNICAL SPECIFICATIONS

PARAMETER	EC	TDS	SALINITY	TEMP.
RANGE SEL.	Automatic	Automatic	Automatic	—
RANGE	0-20, 0-200mS	0-2, 0-20, 0-200ppm	0-20, 0-200ppm	0-100°C
ACCURACY	0-2, 0-20, 0-200mS	0-20, 0-200 ppt	0-2, 0-20, 0-50ppt	± 0.1°C
RESOLUTION	± 0.5%FS±1Digit	± 0.5%FS±1Digit	± 1% FS± 1Digit	0.1°C
CELL CONST	0.01 mS	0.01 ppm	0.01 ppm	----
TEMP. COMP	Adjustable (0.05-9.99)	Adjustable (0.05-9.99)	Adjustable (0.05-9.99)	----
TEMP. COEFF.	Auto/Manual 0-50°C	Auto/Manual 0-50°C	Auto/Manual 0-50°C	----
READOUT	Adjustable (0.1-4.0%)	Adjustable (0.1-4.0%)	Adjustable (0.1-4.0%)	
KEY BOARD	128x64 dots Graphical LCD Display			
PRINTER	5 Soft touch membrane type keys			
STORAGE	USB Interface			
POWER	Up to 1000 Samples			
ACCESSORIES	230V ± 10% AC			
	Cond./TDS/Salinity Cell, Temperature Probe, Electrode Stand, Mains Lead, Dust Cover, Instruction Manual			



SALIENT FEATURES

- ✓ 128x64 dots Graphical LCD Display
- ✓ EC, TDS, Salinity & Temperature Measurements
- ✓ Auto Temperature Compensation
- ✓ Auto Ranging Facility
- ✓ Programmable Ref. Temp & Temp. Coeff in EC Mode
- ✓ 1000 Samples Storage Facility
- ✓ Printer Attachment Facility



16/26

DIGITAL AUTO

CONDUCTIVITY METERS

TECHNICAL SPECIFICATIONS

DISPLAY	3½ Digit LED
MEASUREMENT	Conductivity
COND. RANGES	Automatic 5 Ranges
RANGE SELECTION	Automatic in 5 Ranges
TEMP. RANGE	-5 to 110°C
ACCURACY	COND. $\pm 0.5\%$ FS ± 1 Digit TEMP $\pm 0.1^\circ\text{C} \pm 1$ Digit
TEMPERATURE COMPENSATION	Auto: 0 to 50 °C (in Model LT-26 Only) Manual: 0 to 50 °C in (Model LT-16)
CELL CONSTANT	Adjustable on Digital Display
MEASURING CELL	Platinum DIP Type
CELL CONST. MEASUREMENT	Auto
POWER	230V $\pm 10\%$ AC Dimensions 270x202x80 mm (LXBXH)
WEIGHT	0.8 Kg approx.
ACCESSORIES	Conductivity Cell, Operation Manual, Dust Cover, Cell Stand, Temperature Probe (with models LT-26)



15

DIGITAL AUTO

TDS METERS

TECHNICAL SPECIFICATIONS

DISPLAY	3½ Digit LED
MEASUREMENT	TDS
TDS RANGES	Automatic 5 Ranges
RANGE SELECTION	Automatic in 5 Ranges
TEMP. RANGE	-5 to 110°C
ACCURACY	COND. $\pm 0.5\%$ FS ± 1 Digit
TEMPERATURE COMPENSATION	Temp. $\pm 0.1^\circ\text{C} \pm 1$ Digit
MANUAL	Auto: 0 to 50 °C
CELL CONSTANT	0 to 50 °C
MEASURING CELL	Adjustable on Digital Display
CELL CONST.	Platinum DIP Type
POWER	Auto Measurement
WEIGHT	230V $\pm 10\%$ AC
ACCESSORIES	Dimensions 270x202x80 mm (LXBXH)
	0.8 Kg approx.
	Conductivity Cell, Operation Manual, Dust Cover, Cell Stand,



111

MICROPROCESSOR BASED PHOTO COLORIMETER

TECHNICAL SPECIFICATIONS

pH MEASUREMENTS

DISPLAY	3 Digit Red LED Display.
DISPLAY MODES	% T, O.D. and 3 Concentration Modes C1,C2,C3
ZERO ADJUSTMENT	Automatic (without Knob Rotation)
ACCURACY	± 0.02 O.D.
STABILITY	± 0.02 O.d. Per Hour.
LIGHT SOURCE	6.8 Volt , 0.3 Amp Tungsten Lamp/led
AMPLIFIER	Micro Controller Based.
MEMORY	In built memory to retain last "K" factor for concentration even after power loss.
SAMPLE VOLUME	1 Ml. Minimum.
POWER SUPPLY	230 V ± 10 %, 50 Hz.



STANDARD ACCESSORIES

Glass test tubes	5 Nos.
Instruments cover	1 Nos.
Operating Manual	1 Nos.
Spare Lamp	1 Nos. (Fitted inside)



116

DIGITAL FULLY AUTOMATIC COLORIMETER DIGITAL FILTERS

TECHNICAL SPECIFICATIONS

Range	400-700nm
Display	Dual Digital Display
Filters	Built-in 9 Digital filters >30000 Hours Life
Filters Wavelength	400nm, 430nm, 500nm, 520nm, 540nm, 580nm, 600nm, 620nm, 680nm
Display Mode	Absorbance & Wavelength
Detector	Silicon photo diode
Zero Adjustment	Auto zero
Accuracy	± 0.01 O.D.
Stability	± 0.02 O.D. Per Hour
Light Source	Highly Accurate Laser Source
Amplifier	Micro Controller Based
Volume	1 ml. Minimum
Dimension	L 210 X B 160 X H 80 mm (Approx)
Weight	1.5 Kgs. (Approx)
Power	230V ± 10% AC, 50 Hz.
Battery Backup	6V Ni-Cd Re-Chargeable Battery
Accessories	Set of Test Tube - 6 Nos. Dust Cover - 1 No. Operational Manual



114 DIGITAL

PHOTO COLORIMETER
AUTO ZERO

TECHNICAL SPECIFICATIONS

Filters	8 Filters
Accuracy	± 0.02 O.D.
Reproducibility	± 0.01 O.D.
Stability	± 0.02 O.D per hour
Light Source	6.8V, 0.3amp Tungsten Lamp/LED
Key Board	1 Soft touch Key
Amplifier	I.C. Based
Detector	Selenium photocell/Photodiode
Warm-up Time	5 Minutes.
Sample System Tubes	10 mm dia matched glass test
Power source	230V ± 10 % 50Hz.AC.



STANDARD ACCESSORIES

Glass test tubes	05 Nos.
Instruments cover	1 Nos.
Operating Manual	1 Nos.
Spare Lamp	1 Nos. (Fitted inside)



112 DELUXE

PHOTO COLORIMETER
INBUILT BATTERY

TECHNICAL SPECIFICATIONS

Filters	8 Filters
Accuracy	± 0.02 O.D.
Reproducibility	± 0.01 O.D.
Stability	± 0.02 O.D per hour
Light Source	6.8V, 0.3amp Tungsten Lamp/LED
Key Board	Potentiometer adjustment
Amplifier	I.C. Based
Detector	Selenium photocell/Photodiode
Warm-up Time	5 Minutes.
Sample System Tubes	10 mm dia matched glass test
Power source	230V ± 10 % 50Hz.AC. x 12V Rechargeable Battery



STANDARD ACCESSORIES

Glass test tubes	05 Nos.
Instruments cover	1 Nos.
Operating Manual	1 Nos.
Spare Lamp	1 Nos. (Fitted inside)



12 DIGITAL PHOTO COLORIMETER



TECHNICAL SPECIFICATIONS

Filters	8 Filters
Accuracy	± 0.02 O.D.
Reproducibility	± 0.01 O.D.
Stability	± 0.02 O.D per hour
Light Source	6.8V, 0.3amp Tungsten Lamp/LED
Key Board	Potentiometer adjustment
Amplifier	I.C. Based
Detector	Selenium photocell/Photodiode
Warm-up Time	5 Minutes.
Sample System Tubes	10 mm dia matched glass test
Power source	230V $\pm 10\%$ 50Hz.AC.

STANDARD ACCESSORIES

Glass test tubes	05 Nos.
Instruments cover	1 Nos.
Operating Manual	1 Nos.
Spare Lamp	1 Nos. (Fitted inside)



42 DIGITAL DRY BATH INCUBATOR



TECHNICAL SPECIFICATIONS

Product	Dry bath incubator.
Temperature Range	Ambient +5 to 70 Degree Celsius
Temperature Accuracy	± 10 C
Timer range	1 to 99 minutes.
Temp. Sensor	Pt100
Temp. Controller	PID
Display	16 x 2 alpha-numeric display
Block size	24 x 12 mm Tube holders.
Block Material	Rock solid aluminium block.
Power Supply	230 volt $\pm 10\%$ AC.

SALIENT FEATURES

- ✓ Highly Stable & Accurate
- ✓ Overheat Protection
- ✓ Available with Buzzer Alarm



113

MICROPROCESSOR

HAEMOGLOBIN METER

TECHNICAL SPECIFICATIONS

DISPLAY	3 Digit Red LED Display.
DISPLAY MODES	% T, O.D. AND 3 Concentration Modes C1,C2,C3
ZERO ADJUSTMENT	Automatic (without Knob Rotation)
ACCURACY	± 0.02 O.D.
STABILITY	± 0.02 O.D. Per Hour.
Light Source	6.8 Volt , 0.3 Amp Tungsten Lamp /led
AMPLIFIER	Micro Controller Based.
MEMORY	In built memory to retain last "k" factor for concentration even after power loss.
SAMPLE VOLUME	1 ml. Minimum.
POWER SUPPLY	230 V ± 10 %, 50 Hz



STANDARD ACCESSORIES

Glass test tubes	5 Nos.
Instruments cover	1 Nos.
Operating Manual	1 Nos.
Spare Lamp	1 Nos. (Fitted inside)



113P

PORTABLE

HAEMOGLOBIN METER

TECHNICAL SPECIFICATIONS

10 Testing Strips	
Measuring Range	5-25 gm/dl
Memory	1000 Test results
Auto Calibration	



STANDARD ACCESSORIES

HB Meter
 Canister of Test Strips
 Code Chip
 Control chip
 Capillary Trasfer Tube/Dropper
 Lancing Device
 Sterile Lancets
 AAA Batteries



22

DIGITAL

POTENTIOMETER INBUILT STIRRER

TECHNICAL SPECIFICATIONS

READOUT	3½ digit bright red LED display
RANGE	0 to ± 1999 mV
RESOLUTION	1 mV
ACCURACY	± 1 mV ± 1 digit
OPERATING TEMPERATURE	10°C to 50°C
INBUILT STIRRER	Available
POWER SUPPLY	230V ± 10%AC, 50 Hz
DIMENSIONS	270 x 248 x 101 mm (LxBxH)
WEIGHT	2 kg.

SALIENT FEATURES

- ✓ Inbuilt Stirrer
- ✓ 3½ Digit LED Display
- ✓ Highly Stable & Accurate
- ✓ Compact Design
- ✓ Highly Stable & Accurate



STANDARD ACCESSORIES

Glass Electrode	1 No
Reference Electrode	1 No
Dust Cover	1 No
Electrode Stand	1 No
Magnetic Capsule	1 No
Titration Beaker	1 No
Instruction Manual	1 No.



32

DIGITAL

POTENTIOMETER

TECHNICAL SPECIFICATIONS

RANGE	0 to ± 1999mV
RESOLUTION	1mV
ACCURACY	± 1mV
INPUT IMPEDANCE	> 1012 Ohms
OPERATING TEMPERATURE	100C to 450C
DISPLAY	3½ Digit 0.5" seven segment LED display with auto polarity indication
POWER	230V ± 10% AC, 50 Hz.
DIMENSIONS	275 x 190 x 78mm
WEIGHT	2.5 Kg. (Approx.)
STANDARD ACCESSORIES	Reference Electrode :1 No. Glass Electrode :1 No. Dust Cover :1 No. Electrode Stand :1 No.



SALIENT FEATURES

- ✓ Highly Stable & Accurate
- ✓ 3½ Digit LED Display
- ✓ Rugged & Economical
- ✓ Compact Design



340 PORTABLE

TURBIDITY METER
RESEARCH GRADE



TECHNICAL SPECIFICATIONS

Type	Portable
Description	High-precision Turbidity
Minimum readout (NTU)	0.001
Measuring range (NTU)	0-10, 0-100, 0-1000, 0-4000
Basic error	±3%FS
Repeatability	≤0.5%
Zero drift	±0.5%FS
Applications	Factory condensate water, Domestic sewage
Power	Lithium battery 3.7v/5200mA
Output	Micro USB
Dimensions /N.W.	210x105x65mm/500g
SHIPPING SIZE /G.W.	300x240x90mm/1 kg
STANDARD ACCESSORIES	Cuvette cup x 2 pc, Charger, Suitcase, Manual

SALIENT FEATURES

- ✓ 4.3 inch colored TFT screen
- ✓ Contain 200 curves and customize high precision test curve according to measurement ranges. Users can set up different piecewise curve and coefficient subject to different concentrations which will literally improve measurement precision.
- ✓ ARM9 main control chip makes operations easy, response quick and big storage up to 500M.
- ✓ Adopt special and high precision light filter system to ensure the instruments' stability and accuracy.
- ✓ Cold light source, narrowband interference, with long lifetime up to 100,000 hours.
- ✓ Portable Type: Advanced power management system can show the battery status in real time and be charged via USB port on PC or vehicle.



35 MICROPROCESSOR

TURBIDITY METER



TECHNICAL SPECIFICATIONS

pH MEASUREMENTS

DISPLAY	16x2 Lines Alfa Numeric Display.
RANGE	Two Ranges 0 to 200.0 & 200 to 1000 JTU/NTU
ACCURACY	± 3% Of Full Scale Deflection In 0-1000 JTU/NTU
SAMPLE SYSTEM	30mm Clear Glass Cuvettes
LIGHT SOURCE	6.8 Volt, 0.3 Amp Tungsten Lamp.
DETECTOR	Photodiode
MEMORY	In built memory to retain both range standard solution and last set value even after power loss.
CALIBRATION	With formazine solution
POWER SUPPLY	230 V ± 10 %, 50 Hz.

STANDARD ACCESSORIES

Cuvettes 30 mm Dia.	1 Set
Operation Manual	1 No.
Dust Cover	1 No.



33/34 DIGITAL TURBIDITY METERS



TECHNICAL SPECIFICATIONS

Product	Digital Turbidity Meter (LT-33)	Digital Nephelometer (LT-34)
DISPLAY	3½ Digit LED	3½ Digit LED
DETECTOR	Photocell/Photodiode	Photocell/ Photodiode
RANGE	0 to 1000 NTU in 2 ranges	0 to 200 NTU in 2 ranges
RESOLUTION	1 NTU	0.1 NTU
ACCURACY	± 3% FS ± 1 digit	± 2% FS ± 1 digit
SAMPLE SYSTEM	60 x 25mm Clear Glass Test Tube	
LIGHT SOURCE	LED	
POWER	230V ± 10%, 50Hz. AC	
DIMENSIONS	280 x 175 x 110 mm	
ACCESSORIES	• Test Tubes Set • Operation Manual • Dust Cover	

SALIENT FEATURES

- ✓ Display - 3½ digit LED
- ✓ 30mm flat bottom Test Tube
- ✓ Range 0-1000 NTU (in Model 33)
- ✓ Ranges 0-200 NTU (in Model 34)
- ✓ Highly Stable & Accurate



330 DIGITAL PHOTO FLUOROMETER



TECHNICAL SPECIFICATIONS

FLUORO SENSITIVITY	Full scale deflection obtained with 1 ppm quinine sulphate in 0.1 N sulphuric acid (primary wavelength 360 nm)
DISPLAY	3 digit 7 segment Red LED
EXCITATION SOURCE	12V, 50 W Tungsten Halogen lamp
SENSITIVITY RANGE	Adjustable in 4 ranges
PRIMARY FILTERS	Corning 5840 and Corning 5113 mounted on holders
SECONDARY FILTERS	Corning 4308, Corning 3486 and Corning 3385 mounted on holders
DETECTOR	Highly sensitive wide range Photodiode / Photocell
SAMPLE TEST TUBES	15 mm (D) x 80 mm (H)
MINIMUM SAMPLE	4 ml
POWER	230 V ± 10% AC, 50 Hz.
WEIGHT	4.5 Kg (approximately)
DIMENSIONS	260 x 335 x 160mm (LxBxH)

SALIENT FEATURES

- ✓ 3 Digit Seven Segment LED Display
- ✓ Covers Entire Visible Range
- ✓ Determines the Concentration of
- ✓ Fluorophores & Quinine

STANDARD ACCESSORIES

Test Tubes	Set Of 5
Dust Cover	1 No.
Instruction Manual	1 No.
Primary & Secondary	Set of 5 Filters



52 MICROPROCESSOR

D. O METER

TECHNICAL SPECIFICATIONS

D.O

Range	0 To 20 PPM
Resolution	0.1 PPM
Temperature Comp.	Automatic With Pt 100 Probe & Manual With Keys
Pressure Adjustment	0 To 999 Mm Of Hg Manual
Salinity Correction	0 To 20 Gm/1 (manual)
Calibration	Automatic
Accuracy	± 2 % + 1 Digit 1

Temperature

Range	-20.0 To +200 °c
Resolution	0.1 °c
Accuracy	± 0.2 %
Input Type	Pt 100
Calibration	Manual

Display

Display	16 x 2 LCD
Display Format	Temp & DO Simultaneously
Setting	By Soft Touch Keys
Storage	1000 Samples With Date & time
Interface	USB
Real Time Display	24 Hour Mode With Date
Power Supply	230 V ± 10% Ac 50 Hz
Digital Output	USB
Print Format	All Data Date Wise



18/27 DIGITAL

D.O METERS

TECHNICAL SPECIFICATIONS

DIGITAL D.O METER

Range	0 to 20.0 ppm
Temperature	0 to 100 (in Model LT-27)
Resolution	0.1 ppm
Accuracy	0.1 ppm ± 1 count
Temp. Compensation	0° C to 50° C Manual
Compensation	± 3 %
D.O. Sensor	Amperometric Gold/Silver membrane type.

GENERAL

Display	3½ digit LED display
Power	230V A.C 50 HZ
Weight	2 Kg

STANDARD ACCESSORIES

D O Probe	1 No.
Instruction Manual	1 No.
D.O Membranes	1 Set.
Temperature Probe	1 No. (in Model LT-27)

SALIENT FEATURES

- ✓ Highly Stable & Accurate
- ✓ 3½ Digit LED Display
- ✓ Rugged & Economical
- ✓ Compact Design



59/60/61/62

WATER & SOIL

ANALYSIS KITS

PARAMETERS



	59	60	61	62	64
pH	✓	✓	✓	✓	✓
Cond.	✓	✓	✓	✓	✓
TDS	✓	✓	✓	✓	✓
DO	✓	✓	✓		✓
mV (ORP)	✓		✓	✓	
Salinity	✓	✓	✓		✓
Turbidity		✓			✓
Colorimeter					✓
Temp.	✓	✓	✓	✓	✓



LT-59



LT-61



LT-60



LT-64



LT-62

SPECIFICATIONS

Model	LT-59	LT-60	LT-61	LT-62	LT-64
Product	μ P Water & Soil Analysis Kit		Water & Soil Analysis Kit	Water & Soil Analysis Kit	Water & Soil Analysis Kit
Display	16 x 2 Characters LCD Display		3½Digit LCD	3½Digit LCD	3½ Digit LCD
pH					
Range	0 to 14 pH	0 to 14 pH	0 to 14 pH	0 to 14 pH	0 to 14 pH
Resolution	0.01pH	0.01pH	0.01pH	0.01pH	0.01pH
Accuracy	0.01± 1 Digit	0.01± 1 Digit	0.01± 1 Digit	0.01± 1 Digit	0.01± 1 Digit
Temp. Comp.	0 to 100°C(Auto/Manual)	0 to 100°C (Manual)	0 to 100°C (Manual)	0 to 100°C (Manual)	0 to 100°C (Manual)
Conductivity (E C)					
Range	0-20, 0-200 μ S 0-2, 0-20, 0-200mS	0-200 μ S 0-2, 0-20, 0-200mS	0-20mS	0-20mS	0-20mS
Resolution	0.01 μ S/cm	0.1 μ S	0.1 μ S	0.01mS (10 μ S)	0.01mS (10 μ S)
Range Selection	Automatic	Manual			
Accuracy	±0.5% FS±1 Digit	±0.5% FS± 1 Digit	±0.5% FS± 1 Digit	±0.5% FS± 1 Digit	±0.5% FS± 1 Digit
Cell Constant	Adjustable (0.05 to 10.5)	Adjustable (0.4 to 1.5)	Pre-Adjusted	Pre-Adjusted	Pre-Adjusted
Temp. Coefficient	Adjustable (0.4 to 4.0)	2%	2%	2%	2%
Temp. Comp.	5-50° (Auto/Manual)	Adjustable from table	Adjustable from Table	Adjustable from Table	Adjustable from Table
Reference Temp.	Selectable (5-50°C)	25°C	25°C	25°C	25°C
Temperature					
Range	0-100°C	0-100°C	0-100°C	0-100°C	0-100°C
Resolution	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
Accuracy	±0.1°C± 1 Digit	±0.1°C ± 1 Digit	±0.1°C±1 Digit	± 0.1°C± 1 Digit	± 0.1°C±1 Digit
Sensor	Semi Conductor Type	Semi Conductor Type	Semi Conductor Type	Semi Conductor Type	Semi Conductor Type
TDS					
Range	0-20, 0-200ppm 0-2, 0-20, 0-200 ppt.	0-20, 0-200ppm 0-2, 0-20, 0-200 ppt.	0-20 ppt	0-20 ppt	0-20 ppt
Range Selection	Automatic	Manual			
Resolution	0.01 ppm	0.1 ppm	0.01ppt	0.01ppt	0.01ppt
Accuracy	±0.5% FS±1 Digit	±0.5% FS ±1 Digit	±0.5% FS ±1 Digit	± 0.5% FS ±1 Digit	± 0.5% FS ±1 Digit
Cell Constant	Adjustable (0.5 to 10.5)	0.4 to 1.5 on display	Pre-Adjusted	Pre-Adjusted	Pre-Adjusted
DO					
Range	0-20 ppm	0-20 ppm	0-20 ppm		0-20 ppm
Resolution	0.1 ppm	0.1 ppm	0.1 ppm		0.1 ppm
Accuracy	0.1 ppm ±1Digit	0.1 ppm ±1Digit	0.5 ppm ±1Digit		0.1 ppm ±1Digit
Temp. Comp.	Auto/Manual (5°C to 55°C)	Manual (5°C to 55°C)	Manual (5°C to 55°C)		Manual (5°C to 55°C)
Do Sensor	Gold/Silver Probe	Gold/Silver Amperometric Probe	Gold/Silver Amperometric Probe		
mV (ORP)					
Range	0 to ± 1999.9 mV	0 to ± 1999 mV	—	—	0 to ± 1999 mV
Resolution	0.1 mV	1 mV	—	—	1 mV
Accuracy	± 0.1 mV ± 1 Digit	± 0.1 mV ±1 Digit	—	—	± 0.1 mV± 1 Digit
Turbidity					
Range	—	0-1000 JTU			0-1000 JTU
Resolution	—	1 JTU			1 JTU
Accuracy	—	± 3% FS ± 1 Digit			± 3% FS ± 1 Digit
Sample System	—	30mm Clear Glass Tube			30mm Clear Glass Tube
Salinity					
Range	0-20,0-200ppm,0-2,0-20,05ppt	0 - 50 ppt	0 - 50 ppt	0 - 50 ppt	0.1 ppt
Resolution	0.01 ppm	0.1 ppt	0.1 ppt	0.1 ppt	±0.5% FS ±1 Digit
Accuracy	±1% of Range ± 1 Digit	± 0.5% FS ± 1 Digit	±0.5% FS ±1 Digit	±0.5% FS ±1 Digit	±0.5% FS ±1 Digit
Colorimeter					0.00-1.99 ABS 9 Filters
Power Supply	6V Rechargeable Battery or 230V±10%AC, 50Hz	1.5Vx6Dry Cells or 23V±10%AC< 50Hz	1.5Vx6Dry Cells or 23V±10%AC< 50Hz	1.5Vx6Dry Cells or 23V±10%AC< 50Hz	1.5Vx6Dry Cells or 23V±10%AC< 50Hz
Storage	1000 sample				
Standard Accessories	pH Electrode, Cond./TDS/Salinity Cell, Temp. Probe, Do Probe, Dry Cell container Main Lead, Operation Manual, Bottles for pH Solution & pH Tablets Bottles Turbidity Test Tube Set				

14/17/19/28

PORTABLE INSTRUMENTS

SPECIFICATIONS

MODEL NO.	LT - 14	LT - 17	LT - 19	LT - 28
RANGE	0 - 14 pH	0-1999 μ S, 0-19.99 mS	0-1999 ppm, 0-19.99 ppt	0 - 19.9 ppm
RESOLUTION	0.01 pH	1 μ S	1 ppm	0.1 ppm
IMPEDANCE	> 10 ¹² ohms	-	-	-
SENSOR	Combination pH Electrode	Cond. Cell (Dip type)	TDS Cell (Dip type)	Amperometric DO Probe
BATTERY	9V DC	9V DC	9V DC	9V DC
ACCURACY	0.01pH	±1% FS	±1% FS	±2% FS
TEMP. COMP.	0 - 100°C (Manual)	-	-	5 to 55°C
DISPLAY	3½ digit LCD	3½ digit LCD	3½ digit LCD	3½ digit LCD
SIZE	180 x 85 x 30 mm	180 x 85 x 30 mm	180 x 85 x 30 mm	180 x 85 x 30 mm
WEIGHT	250 gm. (Approx)	250 gm. (Approx.)	250 gm. (Approx.)	250 gm. (Approx.)



LT-14



LT-17



LT-19



LT-28

1201 BIO-CHEMISTRY ANALYZER



TECHNICAL SPECIFICATIONS

Test Method	End Point With Standard/Factor Two Point Kinetics (Fixed Time) Multipoint Kinetics Multi standard up to 8 standards Biochromatic, Dual Wavelength Absorbance Coagulation
Optical System	Principle: Photometric Analysis with Interference Filter Absorbance Range: 0.0000-3.0000 (Linearity: $\pm 1\%$, Repeatability: 0.001, Resolution: 0.0001) Spectral Range Selection: Automatic Via Filter Wheel Wavelengths: 340, 405, 450, 505, 546, 578, 630 nm + 2 Free Positions, ± 2 CML Precision Light Source: 6 V 10 W Long Life tungsten Halogen Lamp
Detector	Photodiode
Thermal System	Peltier Regulated 25°C, 30°C, 37°C & Room Temperature
Accuracy	$\pm 0.3^\circ\text{C}$
Cuvettes	Flow Cell: Quartz 32 μl Path Length: 10 mm Removable Cuvette (Square and round)
Printer	Inbuilt Thermal Printer (57mm)
Display & Input System	7.0 inch color touch screen External Keyboard, Mouse facility
Suction System	Pressure Auto releasing Peristaltic Pump Suction Volume: 300 μl to 3.0 ml Air Column facility after each sample to avoid carry over.
Test Parameter, Storage & CPU	Test Parameters: Up to 300 2,00,000 test results with editable patient information Storage of Quality Control and standard results
DDR2 SD RAM	1 G bit Flash: 256 MB ARM Cortex A8, 720 Mhz
Quality Control	Lew-Jennings Chart Using Westgard's Rule Auto Drawing of QC figures
Operating Conditions	Temperature: 10°C~37°C Relative Humidity: <85%
Power Requirement	Voltage: 100-240 V AC (Auto Adaption)
Frequency	50/60 HZ External Power Adaptor: 19 V 4.7 Amp
Dimensions	400X300X160 (L x W x H)
Weight	6 Kg

SALIENT FEATURES

- ✓ Highly Stable and accurate
- ✓ Absorbance Range upto 3.000
- ✓ Range Selection Automatic Via Filter Wheel
- ✓ Inbuilt Thermal Printer
- ✓ Up to 300 test parameters
- ✓ Storage of 2,00,000 test results with patient information

STANDARD ACCESSORIES

Printer Paper Roll
Removable Cuvette
Optical Mouse
External Key Board
AC Adapter



1290

AUTOMATIC

HEMATOLOGY ANALYZER

TECHNICAL SPECIFICATIONS

Principle Impedance for cell counting Cyanide-free method for HGB

Parameters

WBC, Neu#, Lym#, Mid#, Neu%, Lym%, Mid%, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-SD, RDW-CV, PLT, MPV, PDW, PCT, P-LCR

Histograms

WBC, RBC, PLT histogram

Languages

English, Spanish, Italian, Portuguese, etc.

Calibration

Manual and Auto-calibration

Quality control

3 level QC, LJ graph

Sample volume

Venous mode: 10 μ L venous blood Capillary mode: 10 μ L capillary blood Prediluted mode: 20 μ L capillary blood

Display

8-inch colour touch screen Liquid Crystal Display (LCD)

Resolution

800 600

Storage

100,000 sample results with histograms

Reagent

Lyse (500mL) and Diluent(20L)

Printout

Thermal printer, support external printer

Temperature

18-35°C

Power

AC 100-240V, 50/60 \pm 1Hz

Dimension

410mm \times 435mm \times 472mm



SALIENT FEATURES

- ✓ Throughput: 35T/H 8-inch touch screen 20 parameters + 3 histograms
- ✓ Sample volume: 10 μ L
- ✓ Reagents only
- ✓ Counting modes
- ✓ 100,000 sample results
- ✓ Support LIS and external printer
- ✓ CE marked

MEASUREMENT RANGE

Parameters Measurement range

WBC	(0-99.9 \times 10 ⁹)/L
RBC	(0-9.99 \times 10 ¹²)/L
HGB	(0-300.0)g/L
PLT	(0-999 \times 10 ⁹)/L

PERFORMANCE

PARAMETERS	PRECISION (CV)	
WBC	= 2.0%	(7.0 - 15.0 \times 10 ⁹) L
RBC	= 1.9%	(3.5 - 6.0 \times 10 ¹²) L
HGB	= 1.9%	(110.0 - 180.0)g L
MCV	= 0.4%	(80.0 - 110.0) fL
LT	= 4.0%	(100.0 - 500.0 \times 10 ⁹)/L



1260

MICROPLATE

ELISA READER



TECHNICAL SPECIFICATIONS

Light Source	6V, 10W tungsten halogen lamp, it can work over 5000 hours
Wavelength Range	400 -750 nm
Optical Filters	4 Standard filters: 405, 450, 492, 630 nm, maximum 8 filters
Measurement Methods	Single wavelength, dual wavelength, two points method, dynamic assay, multiple wavelengths
Blank Ways	Single well blank, multiple wells blank, rows and columns blank
Calculation Method	Absorbance, single point calibration, linear regression, quadratic curve, four parameters equation
Measurement Speed	Single wavelength < 3 seconds/96 wells, dual wavelength < 9 seconds/96 wells
Measurement Range	0.0000-4.5000Abs
Resolution	0.0001A

Linearity	$\pm 0.5\%$ or $< 0.025 A$
Repeatability Difference	$< 0.1\%$ or $\pm 0.0025A$
Rows and Columns Difference	$< 0.01 A$
Display	Built-in XP system, 8" touch-screen, shows whole microplate results and calibration curve
Save Information	More than 300 test programs, results of 50 pieces of 96 well, 100000 test results
Interface	4 USB two-way communication interface, 1 RS232, 1 VGA, 1Keyboard connector, 1 mouse connector
Environment	Power supply 12V DC (100V-240V wide input voltage range) temperature: 5°-40°C
External Dimension	52.5cm(20.7 in) x 42.0cm(16.5 in) x 26.0cm(10.20 in)
Net Weight	9 kg.



1261

MICROPLATE

ELISA WASHER



TECHNICAL SPECIFICATIONS

Plate	48/96 well and trips (U,V, Flat bottom)
Residual Volume	$\leq 2\mu l$
Dispensing volume	Adjustable from 50 to 900 μl
Wash cycles	1-16 optional
Mode of wash	From 1 to 12, row and rank, selectable
Soak time	Up to 990 seconds adjustable
Shake time	Up to 990 seconds adjustable
Display	Large LCD
Channel	3 channels for washing liquid, 1 channel for waste liquid
Memory	Up to 100 programs can be stored
Interface	Rs232
Dimension	450(L)mmx310(W)mmx170 (H)mm
Net Weight	7.5kg
Power Supply	AC220V $\pm 10\%$, 50/60Hz; AC110V $\pm 10\%$, 50/60Hz

SALIENT FEATURES

- ✓ Large LCD display, intelligent software, easy to operate
- ✓ Strong washing function, bottom washing and two positions aspiration make completed washing effect
- ✓ 8-channel or 12 channel optional
- ✓ Needle positions adjustable and up to 10 different needle positions pre-settable Pressure, volume & time adjustable, washing times, soap time pre-settable Pressure, volume & time adjustable, washing times, soap time pre-settable, whole plate or single strip reading
- ✓ Needle positions adjustable and up to 10 different needle positions pre-settable 5 position of needles are adjustable, fit for multi-kind of plates
- ✓ Self calibration and trouble alarm function
- ✓ Large memory to store up to 100 program



1240 URINE ANALYZER



TECHNICAL SPECIFICATIONS

High-luminance and white LED, features in long life and good stability.
Large LCD screen, high luminance, abundant contents display,
User-friendly interface.
Optional units: International unit, conventional unit and symbol system.
Three working mode: One-step/slow/fast testing mode,
Suitable for different user group.
Monitoring the whole test process, auto-character and audible prompt.
Be compatible with 8, 10 and 11-parameter test strip.
Standard RS232 interface and interface for data communication.
Built-in thermal printer.

1232 COAGULATION ANALYZER



TECHNICAL SPECIFICATIONS

Testing channels	4
Cuvette incubation positions	24
Reagent incubation positions	6
Wavelength	LED 470nm
Sample type	Plasma
Memory	10,000 results storage
Sample volume	20-40 μ L
Reagent volume	20-40 μ L
Electronic pipette	20-200 μ L Clotting factors are able to expressed in the form of time(Seconds), ratio, g/L Support LIS
Incubation temperature	37.0 \pm 1.0 $^{\circ}$ C
Relative humidity	\leq 85%
Deviation between channels	\leq 5%
Power supply	AC 100-240V 50/60Hz
Size	375mm x 335mm x 175mm
Net weight	5.2 Kg.

SALIENT FEATURES

- ✓ 5-inch touch screen and keypad 4 independent channels Parameters: PT, APTT, TT, FIB, etc.
- ✓ Principle: Clotting, optical method
- ✓ Micro volumes
- ✓ Disposable cuvette no carry-over
- ✓ Precise electronic pipette Languages: English, French, Spanish, Portuguese, etc.
- ✓ Automatic start at reagent addition
- ✓ Thermal printer, auto & manual print

