

CONTENTS



The Vision, Quality Policy, Application	2,3	Auto Melting Point Apparatus	29
Double Beam UV-VIS Spectrophotometer	4,5,6	Digital Melting Point Apparatus	30
μP UV-VIS Spectrophotometer	7,8	Melting Point Apparatus	30
Digital UV-VIS Spectrophotometer	9	Flocculator/Jar Test Apparatus	31
Microprocessor Visible Spectrophotometer	10	Tablet Hardness Tester	32,33
Visible Spectrophotometer	11	Portable Tablet Hardness Tester	34
μP Spectrophotometer	11	Digital Photo Fluorometer	34
Digital Spectrophotometer	12,13	Digital Tele Thermometer	35
μP Flame Photometer	14,15	pH/Ion Meter	35
Dual Channel Flame Photometer	16	Microprocessor pH Meter	36, 37
μP Hemoglobin Meter	16	Digital Potentiometer	38,39
Microprocessor Colorimeter	17,18	Digital pH Meter	40
Digital Colorimeter	18	μP Based pH-EC-TDS Meter	41
Digital Photo Colorimeter	19	Microprocessors Based pH-EC Meter	41
Differential Blood Cell Counter	19	μP Based EC-TDS-Sal Meter	42
Blood/Roller Mixer	20	μP Conductivity/TDS Meter	42
μP Colony Counter	21	Digital Conductivity Meter	43
Digital Colony Counter	21	Digital Conductivity / TDS Meter	44
μP Karl Fischer Moisture Titrator	22	Digital pH, Cond. & Temp. Meter	44
Auto Karl Fischer Titrimeter	22	Digital TDS Meter	45
μP Tablet Dissolution Test Apparatus (14 Station)	23	Digital Salinity Meter	46
μP Dissolution Test Appartus (8/6 Station)	24,25	Digital Turbidity Meter	46,47
Tablet Dissolution Test Apparatus	25	Microprocessor DO Meter	47
μP Disintegration Test Apparatus	26	Digital Dissolved Oxygen Meter	48
Digital Tablet Disintegration Apparatus	26	pH/Cond./TDS/Salt/Temp. Waterproof Tester	48,49
Microprocessor Friability Apparatus	27	Water & Soil Analysis Kits	50,51
Digital Friability Test Apparatus	27	Portable Digital pH Meter/ATC pH Meter	52
Microprocessor Tap Density Tester	28	Portable Digital Conductivity Meter	52
Bulk Density Apparatus	28	Portable Digital TDS Meter	52
Leak Test Apparatus	29	Portable Digital Do Meter	52



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THE *Vision*



EI has a vision to emerge as a premier manufacturer of Scientific & Pharmaceutical Instruments. Certification to ISO 9001:2008 is a first step to realize our vision. We are also planning to take other instrument certification like CE etc. to move towards the international markets.

Quality **POLICY**



EI has vision to Design, Develop & Manufacture High Quality Scientific & Pharmaceutical Test Equipment that result in Complete Customer Satisfaction.

We plan to achieve this through

- Continuously indentifying customer needs and communication the same with in the organization in all promptness.
- Emphasising on the Continuous Improvement in the manufacturing processes.
- Time Bound Delivery
- Organized House Keeping in the Plant.



Applications



- Pharmaceuticals
- Dairy
- Food & Beverage
- Chemical Labs
- Agriculture
- Hospitals
- Textile
- Iron & Steel
- Fertilizers
- Petrol Chemicals
- Sewage Plants
- Blood Chemistries
- Cement
- Mineral Water Plant
- Mines & Geology
- Pollution Control
- Biotechnology
- Potable Water Plants
- Aqua Culture
- Chemical
- Metallurgy
- Plants & Dyes
- Industrial Water Disposal





Double Beam UV-VIS Spectrophotometer - 2377

(With Variable bandwidth)

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/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. 8-Position Auto Cell Changer of 10 mm Path-length provided.
- Optional Sipper Pump

New

TECHNICAL SPECIFICATIONS

➤ FUNCTION	Basic, Wavelength Scan, Multi Wavelength, Kinetics, Quantitative, DNA/Protein
➤ WAVELENGTH RANGE	190 - 1100 nm
➤ SPECTRAL BANDWIDTH (Variable)	0.5/1.0/2.0/4.0/5.0nm
➤ OPTICAL SYSTEM	Double Beam, Grating 1200 lines/mm
➤ WAVELENGTH ACCURACY	± 0.3 nm
➤ WAVELENGTH REPEATABILITY	± 0.2 nm.
➤ SCANNING SPEED	HI, MED & LOW, MAX. 3000 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	< 0.05 %T @ 220 nm & 340 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	8 cell with automatic cell changer -10 mm path- length. (50 mm & 100 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 : 590 x 455 x 250 mm (Approx.)
➤ WEIGHT	Instrument : 17.5 Kg. (Approx.)



Double Beam UV-VIS Spectrophotometer - 2375

SALIENT FEATURES

- Double Beam Optics
- 320 x 240 Dots Graphical LCD
- 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. 8-Position Auto Cell Changer of 10mm path-length provided.

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	± 0.3 nm
➤ WAVELENGTH REPEATABILITY	± 0.2 nm.
➤ SCANNING SPEED	HI, MED & LOW, MAX. 3000 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	< 0.05 %T @ 220 nm & 340 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	8 cell with automatic cell changer - 10 mm path-length. (50 mm & 100 mm path-length optional at extra cost)
➤ LIGHT SOURCE	Halogen & Deuterium Lamps (Pre-Aligned)
➤ PRINTER INTERFACE	Parallel Port for Dot Matrix Printer
➤ PC CONNECTIVITY	USB Port for PC connectivity
➤ POWER	230 V ± 10% AC, 50 Hz
➤ DIMENSIONS (L x B x H)	Instrument : 590 x 455 x 250 mm (Approx.)
➤ WEIGHT	Instrument : 17.5 Kg. (Approx.)



2377

ACCESSORIES

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



Paired Glass and Quartz Cuvettes

Matched Pairs for less data variability

KEEP A SPARE



2375

ACCESSORIES

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



Paired Glass and Quartz Cuvettes

Matched Pairs for less data variability

KEEP A SPARE



Double Beam UV-VIS Spectrophotometer - 3375

(Imported)



SALIENT FEATURES

- Newly Designed Excellent Optical System
- 320*240 LCD Display
- High-Performance
- Automatic Control Systems
- Printer Attachment Facility
- PC Connectivity through USB

TECHNICAL SPECIFICATIONS

➤ WAVELENGTH RANGE	190 - 1100 nm
➤ SPECTRAL BANDWIDTH	1 nm
➤ WAVELENGTH ACCURACY	± 0.3 nm
➤ WAVELENGTH REPEATABILITY	± 0.1 nm
➤ PHOTOMETRIC ACCURACY	± 0.3 %T
➤ PHOTOMETRIC RANGE	-0.4A - 4A
➤ STRAY LIGHT	± 0.05%T
➤ STABILITY	± 0.001 A/h
➤ DISPLAY	320 x 240 LCD
➤ PRINTER	Optional
➤ BASELINE FLATNESS	± 0.001A/h (200 - 1000 nm)
➤ WAVELENGTH SETTING METHOD	Automatically
➤ DETECTOR	Silicon Photodiode
➤ DRIFT	± 0.0004 Abs/h
➤ LIGHT SOURCE	Imported long-life tungsten lamp and Deuterium Lamp
➤ POWER	AC 220V/50Hz or AC 110V/60Hz
➤ WEIGHT	Instrument: 18 Kg. (Approx.)



3375

ACCESSORIES

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



µP UV-VIS Spectrophotometer - 2373

TECHNICAL SPECIFICATIONS

➤ WAVELENGTH RANGE	190 - 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
➤ STRAY LIGHT	0.05 %T @ 220 nm, 340 nm
➤ STABILITY	± 0.002 A/h @500 nm
➤ DISPLAY	128 x 64 Dots Graphical LCD
➤ KEYBOARD	22 Soft Touch Membrane Keys
➤ PHOTOMETRIC MODE	% Transmission, Absorbance and Concentration
➤ DETECTOR	Silicon Photodiode
➤ SAMPLE COMPARTMENT	Standard 4-Position 10 mm path-length Cuvette holder. (50 & 100mm path length at extra cost)
➤ 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. Professional PC Software (Optional) for additional wavelength scan and DNA/Protein Test, available at extra cost.
➤ POWER	230 V±10% AC, 50 Hz



2373

SALIENT FEATURES

- Scanning Spectrophotometer
- Wavelength Range 190 - 1100nm
- 128 x 64 Dot Graphical LCD
- Auto Wavelength Setting
- On-Screen Standard and Kinetic Curve Display
- 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 with professional PC software (optional)
- Pre-aligned design makes it convenient to change Lamps
- Large Sample Compartment, can accommodate 5 - 100 mm path-length cuvettes with optional holders.
- Complete Numeric Keypad for ease of Operation



SALIENT FEATURES

- Wavelength Range 200 - 1000 nm
- 128 x 64 Dot Graphical LCD
- Auto Wavelength Setting
- 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
- Pre-aligned design makes it convenient to change Lamps
- Large Sample Compartment, can accommodate 5 - 100 mm path cuvettes with optional holders

2371

µP UV-VIS Spectrophotometer - 2371

TECHNICAL SPECIFICATIONS

- WAVELENGTH RANGE 200 - 1000 nm
- SPECTRAL BANDWIDTH 2 nm
- OPTICAL SYSTEM Single Beam, grating 1200 lines/mm
- WAVELENGTH ACCURACY ± 0.5 nm
- WAVELENGTH REPEATABILITY 0.4 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
- POWER 230 V $\pm$ 10% AC, 50 Hz



SALIENT FEATURES

- Range 200 to 1020nm
- 4 Position Cuvette Holder
- 3½ digit display of %T, Abs. & Concentration.
- Highly Accurate and Stable

3371

UV-VIS Spectrophotometer - 3371

(Imported)

SALIENT FEATURES

- Automatically Adjust 0%, 100%
- 1200Lines/mm Grating
- Large Sample Compartment

TECHNICAL SPECIFICATIONS

- OPTICAL SYSTEM Czerny Turner Grating Monochromator
- WAVELENGTH RANGE 200 nm - 1020nm
- SPECTRAL BANDWIDTH 5 nm
- WAVELENGTH ACCURACY ± 2 nm
- WAVELENGTH REPEATABILITY < 1 nm
- PHOTOMETRIC ACCURACY ± 0.5 %T
- PHOTOMETRIC REPEATABILITY 0.2 %T
- STABILITY ± 0.001 A/h
- STRAY LIGHT ± 0.3 %T @220nm
- PHOTOMETRIC RANGE -0.000 to 1.999A, 0-200 %T
- DISPLAY MODES 4 Digit LCD
- ZERO SETTING Automatic
- PHOTOMETRIC MODE %T, A, C
- WEIGHT 12 Kg. (Approx.)

New



SALIENT FEATURES

- Covers 190 to 1000 nm
- 4 Position Cuvette Holder
- µP Based Wavelength Selection
- 16x2 Line LCD Data Display
- 4 Digit Wavelength Display
- Printer Interface
- RS-232C Computer Interface

1371

Microprocessor UV-VIS Spectrophotometer - 1371

TECHNICAL SPECIFICATIONS

- WAVELENGTH RANGE 190 to 1000nm
- SPECTRAL BANDWIDTH 2nm
- ACCURACY ± 0.5 nm
- REPEATABILITY ± 0.3 nm
- RESOLUTION 0.1nm
- PHOTOMETRIC RANGE % T : 0 to 100%, Abs. : 0 to 1.999
Conc. : 0 to 19999, K-Factor : 0 to 19999
- ACCURACY ± 0.005 Abs at 1.0 Abs
 ± 0.010 Abs at 1.5 Abs
Less than 0.1% at 320nm
- STRAY LIGHT 16 x 2 Line LCD back lit display
& 4 digit 7-Segment LED for wavelength
- DISPLAY 8 Keys, soft touch membrane type
Up to 100 Samples
Printer interface for any centronics dot matrix printer
RS 232C interface (optional)
- KEY BOARD a) Tungston Halogen Lamp b) Deuterium Lamp (D2)
- DATA STORAGE Wide range silicon photodiode
- PRINTER INTERFACE Complete mirror optics with resolution 1200 lines/mm grating, Czerny turner mount
- SERIAL INTERFACE 4 position adjustable sample holder
- LIGHT SOURCE 230V $\pm$ 10%, 50 Hz. AC
- DETECTOR 550 x 405 x 130 mm (LxBxH) Approx.
- OPTICS 25Kg. (Approx.)
Quartz Cuvettes of 10 mm pathlength (A set of 2),
Plastic Cuvettes : 4 Nos., Instruction Manual,
Mains Lead, Dust Cover
- SAMPLE HOLDER
- POWER
- DIMENSIONS
- WEIGHT
- ACCESSORIES



APPLICATIONS

- Clinical
- Food and Drink
- Industrial
- Pharmaceutical
- Biotechnology
- Molecular Biology

371

Digital UV-VIS Spectrophotometer - 371

TECHNICAL SPECIFICATIONS

- SPECTRAL RANGE 190 to 1000nm
- SPECTRAL BANDWIDTH 2nm
- ACCURACY ± 0.5 nm
- REPEATABILITY ± 0.3 nm
- READ-OUT 4 Digit 7 segment red LED display for wavelength

PHOTOMETRIC

- PHOTOMETRIC RANGE %T : 0 to 100%
Abs. : 0 to 1.999
Conc.: 0 to 1999
 ± 0.005 Abs at 1.0 Abs
 ± 0.010 Abs at 1.5 Abs
 ± 0.002 Abs at 1.0 Abs
Less than 0.1% at 320nm
 ± 1 Count
3½ digit 7 segment red LED display for results
(a) Tungsten – Halogen Lamp
(b) Deuterium Lamp
Wide range silicon photodiode
Complete mirror optics with high Resolution 1200 grooves /mm grating, Czerny – Turner mount
4 Position sample holder
230V + 10% 50Hz, AC
550 x 405 x 130 mm (LxBxH) (Approx)
22 Kg (Approx.)
Quartz Cuvettes of 10 mm pathlength (A set of 2),
Plastic Cuvettes: 4 Nos., Instruction Manual,
Main Lead, Dust Cover
- ACCURACY
- REPEATABILITY
- STRAY LIGHT
- READABILITY
- DATA READOUT
- LIGHT SOURCE
- Detector
- Optics
- Sample Holder
- Power
- Dimensions
- Weight
- Accessories



Paired Glass and Quartz Cuvettes

Matched Pairs for less data variability





SALIENT FEATURES

- Wavelength Range 320-1100 nm
- 128 x 64 Dot Graphical LCD
- On-Screen Standard Curve Display
- Stray Light below 0.3 %T
- Store 200 groups of data & 200 standards curves at the same time
- PC Connectivity through built-in USB Port
- Software expands the functions to Wavelength scanning, Multiwavelength, Quantative & Kinetic Modes (Optional at extra cost)
- Large Sample Compartment, can accommodate 5-100 mm path cuvettes with optional holders

2306

Microprocessor Spectrophotometer - 2306

TECHNICAL SPECIFICATIONS

- WAVELENGTH RANGE 320 - 1100 nm
- BANDWIDTH 4 nm
- WAVELENGTH ACCURACY ± 1 nm
- WAVELENGTH REPEATABILITY 0.3 nm
- WAVELENGTH SETTING Auto
- PHOTOMETRIC ACCURACY ± 0.3 %T
- PHOTOMETRIC REPEATABILITY 0.2 %T
- PHOTOMETRIC RANGE -0.3 - 3.0 A, 0 - 200 %T, 0 - 9999 C
- STABILITY ± 0.002 A/h @500 nm
- BASELINE FLATNESS ± 0.002 A/h
- STRAY LIGHT < 0.3 %T
- SAMPLE COMPARTMENT 4-Position 10mm path length cuvette holder (50 & 100 mm path length at extra cost)
- DATA OUTPUT PORT USB for PC Connectivity
- PARALLEL PORT Parallel Port for Dot Matrix printer
- DISPLAY 128 x 64 Dots Graphical LCD
- LAMPS Tungsten Halogen Lamp
- DETECTOR Silicon Photodiode
- POWER 100 - 250 V AC, 50 Hz
- ACCESSORIES Glass Cuvettes - A Set of 4, Mains Lead, Instruction Manual, Dust Cover



SALIENT FEATURES

- Microprocessor Based
- 4 Digit Seven Segment Red LED Display
- Easy to Use, Press one Button for easy switching of %T, Abs., Conc. modes
- Auto Zero and Blank
- Printer Attachment Facility
- PC Connectivity through USB built-in Port
- Large Sample Compartment, can accommodate 5-100 mm path-length cuvettes with optional holders
- 4-Position rapid cuvette changer

2305

Microprocessor Spectrophotometer - 2305

TECHNICAL SPECIFICATIONS

- WAVELENGTH RANGE 325 - 1000 nm
- SPECTRAL BANDWIDTH 4 nm
- OPTICAL SYSTEM Single Beam, Grating 1200 lines/mm
- WAVELENGTH ACCURACY ± 2 nm
- WAVELENGTH RESOLUTION 2 nm
- PHOTOMETRIC ACCURACY ± 0.5 % T
- PHOTOMETRIC REPEATABILITY 0.3 % T
- PHOTOMETRIC RANGE - 0.3 to 3.0 A, 0 - 200 % T
- STRAY LIGHT < 0.3 % T
- STABILITY ± 0.002 A/h @ 500 nm
- DISPLAY 4 Digit Seven Segment Bright Red LED Display
- KEYBOARD Soft Touch Membrane Type
- PHOTOMETRIC MODE % T, Absorbance, Concentration, Kfactor
- 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 Lamp
- OUTPUT USB Port for PC connectivity, Parallel Port for Dot Matrix printer
- POWER 230 V $\pm 10\%$, 50 Hz. AC
- ACCESSORIES 10 mm Glass Cuvettes - A Set of 4, Black Block, Mains Lead, Instruction Manual, Dust Cover



3305

Visible Spectrophotometer - 3305 (Imported)

SALIENT FEATURES

- Large Sample Room to Place 50mm Cuvette
- Digital Display of %T, Abs and Conc.
- Auto Light Door and ZeroSetting

TECHNICAL SPECIFICATIONS

- OPTICAL SYSTEM Czerny-turner CT grating monochromator, 1200/mm
- WAVELENGTH RANGE 340-1020nm
- SPECTRAL BANDWIDTH 6 nm
- WAVELENGTH ACCURACY ± 3 nm
- WAVELENGTH REPEATABILITY ≤ 1 nm
- MEASUREMENT RANGE -0.000 to 1.999A, 0-199.9%
- PHOTOMETRIC ACCURACY $\pm 1\%$ T
- PHOTOMETRIC REPEATABILITY 0.5%T
- MEASURING OPTICAL PATH 50 mm
- STRAY LIGHT $\pm 1.0\%$ T (340 nm)
- STABILITY ± 0.004 A/h(500 nm preheat 1 hour)
- DISPLAY MODES 4 LCD
- BASIC MEASUREMENT T, A, C
- LIGHT SOURCE 6V10W
- OPERATING VOLTAGE 220V/110VAC,50-60Hz



SALIENT FEATURES

- Highly Accurate & Stable
- Range 340 to 960 nm
- 16x2 line backlit LCD Display
- Printer Attachment Facility
- Storage for 100 samples
- RS232C Computer Interface (optional)
- Soft Touch Membrane Keys

1305

µP Spectrophotometer - 1305

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 19999
- DETECTOR Silicon Photodiode
- LIGHT SOURCE 6 V, 10 W, Tungsten Halogen Lamp
- MONOCHROMATOR 600 lines/mm diffraction grating
- SAMPLE HOLDER 10 mm glass cuvettes
- SPECTRAL BANDWIDTH < 5 nm
- WAVELENGTH RESOLUTION 1 nm
- WAVELENGTH ACCURACY ± 1 nm
- REPEATABILITY ± 2 nm
- DISPLAY 16x2 line alphanumeric backlit LCD display
- OPERATING TEMP. RANGE 5° to 45°C
- POWER 230 V $\pm 10\%$ AC, 50 Hz
- DIMENSIONS (LxBxH) 475 x 285 x 130 mm (Approx.)
- WEIGHT 8.5 Kg. (Approx.)
- ACCESSORIES Matched Cuvettes : 1 Set of 2, Dust Cover : 1 No. Instruction Manual : 1 No.

New



Digital Spectrophotometer - 302

SALIENT FEATURES

- Range 340 to 960 nm
- 3½ Digital Display for Data
- Highly Stable & Accurate
- Direct Concentration Facility
- Two Cuvettes Position Available

TECHNICAL SPECIFICATIONS

- | | |
|--------------------------|---|
| ➤ RANGE | 340 to 960nm |
| ➤ RESOLUTION | 0.1%T, Abs. 0.001, Conc. 1.0 |
| ➤ OUTPUT | %T: 0 to 100%, Abs : 0 to 1.999, Conc.: 0 to 1999 |
| ➤ DIRECTOR | Silicon Photodiode |
| ➤ LIGHT SOURCE | 6V, 10W, Tungsten Halogen Lamp |
| ➤ MONOCHROMATOR | 600 lines/ mm holographic grating |
| ➤ SAMPLE HOLDER | 10 mm Test Tube & 3-Position rapid cuvette changer |
| ➤ SPECTRAL BANDWIDTH | 10nm |
| ➤ WAVE LENGTH RESOLUTION | 1nm |
| ➤ WAVELENGTH ACCURACY | ± 2.5nm |
| ➤ REPEATABILITY | ± 2 nm |
| ➤ RECORDER OUTPUT | Available |
| ➤ DISPLAY | 3½ Digit Bright Red LED Dual Display for Data & Wavelength |
| ➤ POWER | 230±10%AC, 50Hz |
| ➤ DIMENSIONS | L 475 X B 285 X H 130 mm (Approx.) |
| ➤ WEIGHT | 8.5 Kg. (Approx.) |
| ➤ ACCESSORIES | Cuvettes (10 mm path length): 2 nos., Operation Manual, Dust Cover. |

Digital Spectrophotometer - 301

TECHNICAL SPECIFICATIONS

- | | |
|------------------------|---|
| ➤ RANGE | 340 to 960 nm |
| ➤ RESOLUTION | 0.1% T, Abs. 0.001, Conc. 1.0 |
| ➤ OUTPUT | % T: 0 to 100%, Abs : 0 to 1.999, Conc.: 0 to 1999 |
| ➤ DETECTOR | Silicon Photodiode |
| ➤ LIGHT SOURCE | 6V, 10W, Tungsten Halogen Lamp |
| ➤ MONOCHROMATOR | 600 lines/ mm holographic grating |
| ➤ SAMPLE HOLDER | 10mm Test Tubes |
| ➤ SPECTRAL BANDWIDTH | 10nm |
| ➤ WAVE LENGTH ACCURACY | 5nm |
| ➤ WAVELENGTH ACCURACY | ±2.5 nm |
| ➤ REPEATABILITY | ± 2nm |
| ➤ RECORDER OUTPUT | Available |
| ➤ DISPLAY | 3½ Digit Bright Red LED Display |
| ➤ POWER | 230V ±10%AC, 50Hz |
| ➤ DIMENSIONS | L 475 X B 285 X H 130mm (Approx.) |
| ➤ WEIGHT | 8.5 Kg. (Approx.) |
| ➤ ACCESSORIES | * Cuvettes (10 mm path length) : 2 Nos.
* Dust Cover : 1 No.
* Operation Manual : 1 No. |

Applications

- Organic compounds in Biological matter
- Glucose, Carbohydrates & Proteins etc., in foods
- Alcohols In Beverages
- Purity of constituents in Pharmaceuticals
- Toxic elements, Cd, Pb, Hg etc. in effluents

Digital Spectrophotometer - 304 & 305

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 Glass Cuvette & provision for 50 mm Cuvette available in Model - 304
10 mm Glass Cuvette in Model - 305 |
| ➤ SPECTRAL BANDWIDTH | 5 nm |
| ➤ WAVELENGTH RESOLUTION | 1 nm |
| ➤ WAVELENGTH ACCURACY | ± 2.5 nm |
| ➤ REPEATABILITY | ± 2 nm |
| ➤ RECORDER OUTPUT | Available |
| ➤ DISPLAY | 3½ Digit Bright Red LED Dual Display for Data & Wavelength |
| ➤ OPERATING TEMP. RANGE | 5° to 45°C |
| ➤ POWER | 230 V±10% AC, 50 Hz |
| ➤ DIMENSIONS (LxBxH) | 475 x 285 x 130 mm (Approx.) |
| ➤ WEIGHT | 8.5 Kg. (Approx.) |
| ➤ ACCESSORIES | Cuvettes (10 mm) : 2 Nos. Dust Cover : 1 No.
Operation Manual : 1 No. |



305

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 path length (304 only)



Paired Glass Cuvettes

Matched Pairs for less data variability





1382

µP Flame Photometer - 1385 & 1382

SALIENT FEATURES

- Auto Gas Cutoff Facility (Model - 1385 only)
- Auto Flame Failure Detection Facility (Model - 1385 only)
- µP 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

TECHNICAL SPECIFICATIONS

➤ RANGE		General Range	Serum Range	Urine Range
		ppm	meq/l	meq/l
		Na : 0-100	Upto 250 meq/l, 1:100 dil.	0-200 meq/l, 1:100 dil.
		K : 0-100	Upto 250 meq/l, 1:100 dil.	0-100 meq/l, 1:100 dil.
		Ca : 0-100	Upto 250 meq/l, 1:100 dil.	0-10 meq/l, 1:2 dil.
		Li : 0-100	Upto 250 meq/l, 1:100 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) {Ba can be 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		20 x 4 Character alphanumeric LCD display with Backlit		
➤ 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		
➤ FLAME FAILURE		Auto Detection (Model - 1385 only)		
➤ GAS CUTOFF		Automatic (Model - 1385 only)		
➤ 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		
➤ RS 232 INTERFACE		Available (PC software at extra cost)		
➤ WEIGHT		Main Unit : 8 Kg. (Approx.)		
➤ POWER SUPPLY		230 V AC ± 10%, 50 Hz		

COMPRESSOR UNIT

- Air Supply : By oil free mini compressor unit with pressure regulator
- Combustion Gas LPG : Controlled by precision regulator
- Power : 230 V + 10% AC, 50 Hz
- Dimensions (L x B x H) : 290 x 255 x 210 mm (Approx.)
- Box : 370 x 358 x 300 mm
- Weight : 8 kg. (Approx.)
- Box : 10 kg (Approx.)



1381

SALIENT FEATURES

- 5 Digit Seven Segment bright red LED display (Model - 1381)
- 2½ Digit Seven Segment bright red LED display (Model - 381)
- Narrow Band Interference Filters
- Single Channel
- Mixing Chamber designed for stable flame
- Stainless Steel round burner
- Concentric Non-Corrosive Nebulizer



381

Microprocessor Flame Photometer - 1381

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

	ppm	Meq/l	
	General	Serum	Urine
➤ RANGE	Na : 0.1 to 100	Na : 0-200, 1:100 dil.,	0-250, 1:100 dil.
	K : 0.1 to 100	K : 0-10, 1:100 dil.,	0-100, 1:100 dil.
	Ca : 15 to 100	Ca : -	-
	Li : 0.5 to 100	Li : 0-2, 1:5 dil.,	0-10, 1:2 dil.
	meq values are claimed with appropriate dilution		
➤ FILTERS	Na & K supplied (Ca & Li are optional at extra cost)		
➤ SENSITIVITY	0.1 ppm		
➤ ACCURACY	± 1% up to 40 ppm, ± 2% above 40 ppm		
➤ READOUT	5 digit seven segment bright red LED display		
➤ FLAME SYSTEM	LPG & dry oil free air		
➤ DETECTOR	Photodiode		
➤ CALIBRATION	3 point calibration		
➤ POWER	230 V ±10% AC, 50 Hz		
➤ WEIGHT	Main Unit : 8 Kg. (Approx.) Compressor : 8 Kg. (Approx.)		
➤ DIMENSIONS	365 x 245 x 220 mm (Approx.) (L x B x H)		
➤ AIR SUPPLY	By oil free mini compressor unit with pressure regulator		
➤ COMBUSTION GAS	LPG		
➤ ATOMIZER	Axial flow type		
➤ BURNER	Stainless Steel		

Microprocessor Flame Photometer - 381

TECHNICAL SPECIFICATIONS

➤ RANGE	Na	: 0-100 ppm
	K	: 0-100 ppm
	Ca	: 15-100 ppm (Optional)
	Li	: 10-100 ppm (Optional)
➤ SENSITIVITY	Sodium (Na)	: 5 ppm
	Potassium (K)	: 5 ppm
	Calcium (Ca)	: 10 ppm (Optional at extra cost)
	Lithium (Li)	: 10 ppm (Optional at extra cost)
2½ digit bright red LED display		
± 2% up to 40 ppm, ± 5% above 40 ppm		
Auto ignition		
375 X 245 X 220 mm (Approx.)		
8 Kg. (Approx.)		
Measurements one element at a time		
± 2 Counts		
Silicon Photodiode		
Na & K supplied (Ca & Li are optional at extra cost)		
Black bakelite, axial flow type		
LPG and dry oil free air		
10 minutes		
230V ± 10% AC, 50Hz		

COMPRESSOR UNIT (For all Flame Photometers)

➤ Air Supply	By oil free mini compressor unit with pressure regulator
➤ Combustion Gas LPG	Controlled by precision regulator
➤ Power	230 V ± 10% AC, 50 Hz
➤ Dimensions	290 x 255 x 210 mm (Approx.) (L x B x H)

*Note: All Flame Photometers are supplied with Compressor Unit.



COMPRESSOR UNIT

- Air Supply : By oil free mini compressor unit with pressure regulator
- Combustion Gas LPG : Controlled by precision regulator
- Power : 230 V + 10% AC, 50 Hz
- Dimensions (L x B x H) : 290 x 255 x 210 mm Approx.)
- Box : 370 x 358 x 300 mm
- Weight : 8 kg. (Approx.)
- Box : 10 kg (Approx)



SALIENT FEATURES

- Direct Display in Hb Units
- 1ml Sample Volume
- Highly Accurate and Easy to Operate
- Storage of Factor in Memory



Dual Channel Flame Photometer - 391/392

SALIENT FEATURES

- Dual Channel
- Model 391 for Clinical use in meq
- Model 392 for General use in ppm
- Stainless steel round burner
- Concentric Non-Corrosive Nebulizer
- Narrow Band interface Filters
- Dual 2½ digit red LED display

TECHNICAL SPECIFICATIONS

	391	392
➤ RANGE	Sodium (Na) : Serum 0-200 meq/l : Urine 0-200 meq/l Lithium (Li) : Serum 0-2 meq/l(optional) Potassium (K) : Serum 0-10 meq/l : Urine 0-100 meq/l Calcium (Ca) : Urine 0-10 meq/l (optional) mEq values are claimed with appropriate dilution	0-100 ppm 0-100 ppm 0-100 ppm 0-100 ppm
➤ ACCURACY	± 2% up to 100 meq ± 5% above 100 meq	± 2% up to 40 ppm ± 5% above 40 ppm
➤ READOUT	Dual 2½ digit bright red LED displays	
➤ 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	
➤ 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±10% AC, 50Hz	

µp Haemoglobin Meter - 1315

TECHNICAL SPECIFICATIONS

➤ MEASURING METHODS	Cyanmethaemoglobin
➤ MEASURING RANGE	0-30g/dl of Hb
➤ DISPLAY	3 digit 7 segment LED
➤ KEY PAD	Soft Touch Membrane Type
➤ ZERO SETTING	Automatic
➤ DILUTION RATIO	1:251
➤ SAMPLE VOLUME	1ml
➤ CALIBRATION	Automatic
➤ WAVELENGTH	546 nm
➤ DETECTOR	Highly sensitivity silicon photodiode
➤ POWER SUPPLY	230 ± 10% V AC 50 Hz
➤ WEIGHT	1.5 Kgs. (Approx.)
➤ ACCESSORIES	Glass Test Tubes, Operation Manual, Dust Cover



SALIENT FEATURES:

- Direct Concentration Facility
- Range from 400 to 700 nm
- 16 x 2 line LCD with Backlit
- Printer Attachment facility
- Storage for 100 Samples
- Soft Touch Membrane Keys



Microprocessor Colorimeter - 1312

TECHNICAL SPECIFICATIONS

➤ WAVE LENGTH RANGE	400 to 700 nm
➤ RESOLUTION	1 %T, 0.01Abs., 0.01 Conc., 1 K-Factor
➤ % TRANSMISSION	0 – 100 % T
➤ ABSORBANCE	0 – 1.99 A
➤ CONCENTRATION	0 – 19999 C
➤ K FACTOR	1 – 19999
➤ PHOTO DETECTOR	Silicon Photodiode / Photo Cell
➤ DISPLAY	16x2 line alphanumeric LCD display with backlit
➤ KEYBOARD	8 Keys, soft touch membrane keys
➤ DATA STORAGE	Up to 100 Samples
➤ LIGHT SOURCE	Special LED Light Source
➤ SAMPLE SYSTEM	10 mm path length matched glass test tubes
➤ FILTERS	400, 450, 490, 520, 540, 570, 620, 680 nm
➤ PRINTER INTERFACE	Centronics interface for any Dot Matrix printer
➤ WEIGHT	2.5 Kg.
➤ POWER SUPPLY	230V AC ±10%, 50Hz. with in-built stabilizer

µP Photo Colorimeter - 1313

SALIENT FEATURES

- Direct Concentration & K Factor Facility
- % Transmission and Absorbance Modes
- Auto Zeroing Facility
- Range 400 to 700 nm
- Soft Touch Membrane Keys
- Low Cost

TECHNICAL SPECIFICATIONS

➤ WAVELENGTH RANGE	400 to 700 nm
➤ RESOLUTION	1 % T, 0.01 Abs., 0.1 Conc. , 1 KFactor
➤ % TRANSMITTANCE	0 - 100%
➤ ABSORBANCE	0 - 1.99 A
➤ CONCENTRATION	0.1-199
➤ K FACTOR	1.0 - 999
➤ PHOTO DETECTOR	Silicon Photodiode/Photo Cell
➤ DISPLAY	3 Digit 7 Segment Bright Red LED Display
➤ KEYBOARD	3 Keys, Soft touch type
➤ AUTO ZEROING	Available
➤ LIGHT SOURCE	Special LED Light Source
➤ SOLUTION VOLUME	1 ml (Minimum)
➤ SAMPLE SYSTEM	10 mm path length matched glass test tubes
➤ OPTICAL FILTERS	8 filters mounted on the turret 400, 450, 490, 520, 540, 570, 620, 680 nm
➤ POWER SUPPLY	230V ± 10% AC 50Hz. with in-built stabilizer
➤ ACCESSORIES	A Set of Matched Test Tubes, Operation Manual, Dust Cover



1311



µP Photo Colorimeter - 1311

SALIENT FEATURES

- Highly Accurate & Stable
- % Transmission and Absorbance Modes
- Auto Zeroing Facility
- Range 400 to 700 nm
- Soft Touch Membrane Keys
- Low Cost

TECHNICAL SPECIFICATIONS

- WAVELENGTH RANGE 400 to 700 nm
- RESOLUTION 1% T, 0.01 Abs
- % TRANSMITTANCE 0-100%
- ABSORBANCE 0 - 1.99 A
- PHOTO DETECTOR Silicon Photodiode/Photo Cell
- DISPLAY 3 Digit 7 Segment Bright Red LED Display
- KEYBOARD 2 Keys, Soft touch membrane type
- AUTO ZEROING Available 0.00 for Abs. and 100% for % T
- LIGHT SOURCE Special LED Light Source
- SOLUTION VOLUME 1 ml (Minimum)
- SAMPLE SYSTEM 10 mm path length matched glass test tubes
- OPTICAL FILTERS 8 filters mounted on the turret
400, 450, 490, 520, 540, 570, 620, 680 nm
- POWER SUPPLY 230V ± 10% AC 50Hz. with in-built stabilizer
- ACCESSORIES A Set of Matched Test Tubes, Operation Manual, Dust Cover

312



FOR DETERMINATION OF CONCENTRATION OF CONSTITUENTS IN:

- Clinical, Pharmaceutical, Food
- Beverage & Water Analysis
- Analytical & Agricultural Chemistry
- Metallurgy
- Blood

SALIENT FEATURES

- Microcontroller Based
- 1ml sample volume
- Range from 400 to 700nm
- Highly Stable & Accurate
- Battery/Mains operated Colorimeter also Available
- Auto Zero Facility

TECHNICAL SPECIFICATIONS

- WAVE LENGTH RANGE 400 to 700 nm
- OPTICAL FILTERS 8 filters mounted on the turret
400, 450, 490, 520, 540, 570, 620, 680 nm
- SAMPLE SIZE 1ml
- SAMPLE SYSTEM 10mm path length matched glass test tubes
- DISPLAY 2½ digit 7 segment red LED display
- LIGHT SOURCE LED
- READOUT 0 to 1.99 Abs.
- DETECTOR Silicon Photodiode
- POWER 230V±10% AC, 50Hz.
- DIMENSIONS 192 x 230 x 105mm (LxBxH)
- WEIGHT 1.5 Kgs. (Approx.)

alpha 03



Digital Photo Colorimeter - alpha 03

SALIENT FEATURES

- 1ml sample volume
- Range from 400 to 700nm
- Highly Stable & Accurate
- Very Economical
- Battery/Mains operated Colorimeter also Available

TECHNICAL SPECIFICATIONS

- DISPLAY 2 ½ Digit LED
- RANGE 400 - 700 nm
- OUTPUT Abs : 0 to 1.99
- RESOLUTION Abs : 0.01
- ACCURACY 0.5% FS ±1 Digit
- DETECTOR Photodiode
- FILTERS 8 filters - 400, 450, 490, 520, 540, 570, 620, 680nm
- LIGHT SOURCE LED
- MINIMUM VOLUME 1 ml
- POWER 230 V ± 10% AC, 50Hz
- DIMENSIONS 192 x 230 x 105mm (LxBxH)
- WEIGHT 1.5 Kg. (Approx.)
- ACCESSORIES * Test Tube Set of 5,
* Dust Cover, Instruction
* Manual.

New

368



Differential Blood Cell Counter - 368

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

TECHNICAL SPECIFICATION

- CELL COUNTING KEY 8 Keys
- TOTAL KEYS 11 Keys (8 Cell keys and 3 Function keys)
- BODY Metal Body
- DISPLAY 16x2 Line LCD Display
- MAINS INPUT 230V ± 10% AC, 50 Hz
- WEIGHT 1.5 kg (Approx.)
- DIMENSIONS 250 x 230 x 150 mm (LxBxH)

New



Digital Blood/Roller Mixer - 1524

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

TECHNICAL SPECIFICATIONS

- MODEL 1524
- ROLLER SIZE 230mm length
- CONTROL Digital
- NO. OF ROLLERS 4
- SPEED 33rpm (Approx.)
- MAXIMUM LOAD 5
- TIMER Continuous or timer operation
- POWER SUPPLY 230V ± 10% AC 50Hz.



New

Blood/Roller Mixer - 524

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

TECHNICAL SPECIFICATIONS

- MODEL 524
- ROLLER SIZE 230mm
- CONTROLS Analog
- NO. OF ROLLERS 4
- SPEED 33rpm (Approx.)
- MAXIMUM LOAD 5
- TIMER No
- POWER SUPPLY 230V ± 10% AC 50Hz.



New

μP Colony Counter - 1361, 1362 & 1363

SALIENT FEATURES

- Readout from 0 - 999999 Counts (Model 1363)
- Count Correction Facility
- Average Mode
- Result-Count Storage
- Audible Confirmation of Each Count
- Auto Marker Pen
- Uniform Glare Free Illumination
- Wolffhugel Glass Grid with Focussing Facility
- LED Based Illumination

TECHNICAL SPECIFICATIONS

- DISPLAY 3 - Digit Seven Segment LED in Model 1361
4 - Digit Seven Segment LED in Model 1362
6 - Digit Seven Segment LED in Model 1363
- MAX COUNT 999 in Model 1361, 9999 in Model 1362 & 999999 in Model 1363
- KEYBOARD 6 soft touch membrane keys
- CORRECTION Count correction facility available to cancel the unwanted counts
- STORAGE 100 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±10% AC, 50 Hz



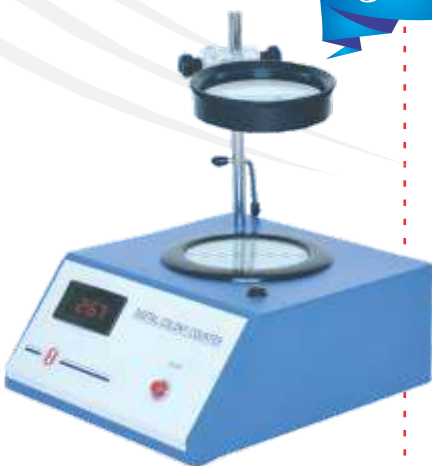
Digital Colony Counter - 361, 362 & 363

SALIENT FEATURES

- 110mm Dia Magnifying Glass
- Audible Confirmation of each count
- Uniform glare free illumination
- Digital Readout from 0-999 (Model 361)
- Digital Readout from 0-9999 (Model 362)
- Digital Readout form 0-999999 (Model 363)
- Auto Marker pen
- Wolffhugel glass grid focusing facility

TECHNICAL SPECIFICATIONS

- DIGITAL DISPLAY 3 digit, 999 Maximum Count (Model 361)
4 digit, 9999 Maximum Count (Model 362)
6 Digit, 999999 Maximum Count (Model 363)
- DISH SIZE 110 mm
- MAGNIFICATION x 1.7
- DIMENSIONS 255 x 220 x 100 mm (Approx.) L x B x H
- WEIGHT 3 Kg. (Approx.)
- POWER 230 V ± 10%, 50 Hz. AC
- ACCESSORIES Marking Pen, Magnifier Lens, Dust Cover





SALIENT FEATURES

- Microprocessor Based Technology
- Auto Computation of Moisture in ppm, %age & mg H₂O
- Storage of Date, Time, Batch No. and Final Results
- 8 Digit Digital Display
- Motorized Dispensing
- External Printer Attachment Facility

1760

µP Karl Fischer Moisture Titator - 1760

TECHNICAL SPECIFICATIONS

- MEASURING RANGE 50ppm to 100% of moisture
- MEASURING METHOD Karl Fischer volumetric titration method
- KF DISPENSING Highly sensitive motorized dispensing system
- TITRANT VOLUME RESOLUTION 0.01 ml
- TRITRANT VOLUME INDICATION 0.00 to 99.99 ml on Display
- MOISTURE CONTENT %age: (0.00 to 100%)
- CALCULATION (AUTO) ppm : (10 to 999999)
- mg H₂O: (0.00 to 999.99)
- KF FACTOR In built automatic KF Titer Factor Calculation facility
- END POINT ALARM Visual LED and Audible Alarm
- WAIT TIME (END POINT ALARM) Adjustable (1 to 59 seconds)
- DISPENSING PUMP CAL Available through Keyboard
- MDF CALIBRATION By weight, through DST or through 25µl H₂O
- KEYBOARD 24 keys soft touch, membrane type
- SAMPLE STORAGE Up to 20 latest samples using FIFO memory
- DISPLAY 8 digit bright red, seven segment LED display
- CLOCK In-built clock with date, time display
- STIRRER In-built magnetic stirrer with adjustable speed
- REAGENT BOTTLE 3x250 ml bottles for KF Reagent, Acetone & Calcium Chloride
- PRINTER INTERFACE External Dot matrix Printer interface available
- POWER 230V ± 10% 50Hz AC
- DIMENSIONS L x 360 x B x 295 x H x 175mm (Approx.)

Auto Karl Fischer Titrimeter - 761

SALIENT FEATURES

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

TECHNICAL SPECIFICATIONS

- DISPLAY Array of 10 LEDs
- SAMPLE SIZE 1-50mg of H₂O
- 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 ± 10%, 50 Hz. AC



USP/IP Compliant

µP Tablet Dissolution Test Apparatus (14 Station) - 2914

New

SALIENT FEATURES

- 14 Station (Model - 2914)
- 12 Station (Model - 2912)
- Complies with USP, IP specifications
- Extremely useful for pharmaceutical labs
- Programmable stirrer control (25 to 200 RPM)
- 20 x 4 line alphanumeric LCD display with backlit
- 19 Soft touch membrane type keys
- 20 independent programmable setups for routine & sustain mode with storage
- 200 sample storage facility
- Printer attachment facility
- Audio visual indicators for system status
- Easy to empty and clean water bath with bottom drainage
- Continuation of last sample run in case of power failure

2914



TECHNICAL SPECIFICATIONS

GENERAL

- STATIONS 14 stations in Model – 2914
12 stations in Model – 2912
- DISPLAY 20 x 4 line alphanumeric LCD display with backlit
- KEYBOARD 19 soft touch membrane type keys
- LED'S 4 LED's for different status indications. 3 LED's for test status like Run, Alarm, End & 1 LED for heater ON/OFF status
- SETUP DATA 20 different test setups available in routine and sustain modes
- PRINTER ATTACHMENT Provision for the attachment of dot-matrix printer with centronics parallel port interface available

STIRRER

- SPEED 25 to 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 as per IP/USP

SAMPLE

- REACTION VESSEL 1000 ml jar with stirrer pedal and basket
- HEATER 1250 W x 2 Nos
- POWER 230 V ± 10%, 50 Hz. AC





USP/IP Compliant

µP Dissolution Test Appartus - 1918 & 1916

TECHNICAL SPECIFICATIONS

GENERAL

- STATIONS
Model - 1918 - 8 Station
Model - 1916 - 6 Station
- DISPLAY
20 x 4 Line Alphanumeric LCD display with Backlit
- KEYBOARD
19 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.
- PROGRAMMABLE SETUPS
Facility for 20 different test setups available in Routine and Sustain modes.
- PRINTER ATTACHMENT
Provision for the attachment of dot-matrix printer with centronics parallel port interface available.

STIRRER

- SPEED
25 to 200 RPM ± 1 RPM
- RESOLUTION
1 RPM
- ACCURACY
 ± 1 RPM

TEMPERATURE

- RANGE
30 °C to 50 °C
- ACCURACY
 ± 0.2 °C
- TEMP. CONTROL
Microprocessor based using PT100/ Semiconductor sensor as per USP/IP

SAMPLING

- REACTION VESSEL
1000 ml jar with stirrer pedal and basket
- HEATER
1800W
- POWER
230 V $\pm 10\%$ AC, 50 Hz

STANDARD ACCESSORIES

- Main Unit with Acrylic Tank, Rectangular Cover Plate and Water Bath Temperature Sensor (T1) : 1 No.
- Reaction Vessel Capacity 1000 ml (1918 - 8 Nos., 1916-6 Nos.) : 1 Set
- Round Acrylic Cover Plate with Hole and a Large Slit (1918 - 8 Nos., 1916-6 Nos.) : 1 Set
- S.S. Paddles, Stirrer Shaft, S.S. Wire Mesh Basket : 1 Set
- External Temperature Sensor (T2) for Vessel : 1 No.
- Glass Pipettes with Rubber Bellows : 3 Nos.
- Instruction Manual : 1 No.
- Dust Cover : 1 No.



1918

SALIENT FEATURES

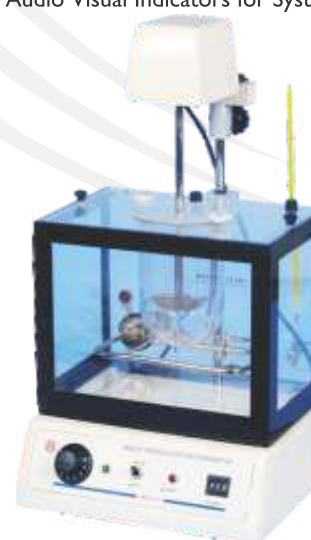
- 8 Station (Model - 1918)
- 6 Station (Model - 1916)
- Complies with USP, IP Specifications
- Extremely Useful for Pharmaceutical Labs
- Programmable Stirrer Control (25 to 200 RPM)
- 20 x 4 Line Alphanumeric LCD Display with Backlit
- 19 Soft Touch Membrane Type Keys
- 20 Independent Programmable Setups for Routine & Sustain Analysis with Storage Facility
- 200 Samples Storage Facility
- Printer Attachment Facility
- Audio Visual Indicators for System Status
- Easy to Empty and Clean Water bath with Bottom Drainage
- Continuation of last Sample Run in case of Power Failure



1912

SALIENT FEATURES

- Complies with USP, IP specifications
- Extremely useful for pharmaceutical labs
- Highly Accurate and Easy to Operate
- Programmable Stirrer Control
- Continuation of last Sample Run in case of Power Failure
- 20 x 4 Line LCD with Backlit
- 20 Setups Storage Facility
- 200 Samples Storage Facility
- Printer Attachment Facility
- Audio Visual Indicators for System Status



912

µP Dissolution Test Apparatus - 1912

TECHNICAL SPECIFICATIONS

GENERAL

- DISPLAY
20 x 4 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. Facility for 20 different test setups available in Routine and Sustain mode.
- SETUP DATA
Provision for the attachment of dot-matrix printer with centronics parallel port interface available.
- PRINTER

STIRRER

- SPEED
25 - 160 RPM ± 1 RPM
- RESOLUTION
1 RPM
- ACCURACY
 ± 1 RPM
- DEPTH ADJUSTMENT
25 mm to 40 mm

TEMPERATURE

- RANGE
20 °C(Ambient) to 40 °C
- ACCURACY
 ± 0.2 °C

SAMPLING

- REACTION VESSEL
1000 ml jar with stirrer pedal and basket
- HEATER
1 KW
- POWER
230 V $\pm 10\%$ AC, 50 Hz
- DIMENSION
330 x 300 x 660 mm (Approx.)
- WEIGHT
11 Kg. (Approx.)

Tablet Dissolution Test Apparatus - 912

TECHNICAL SPECIFICATIONS

- SPEED
25-200 RPM ± 1 RPM
- RESOLUTION
1 RPM
- ACCURACY
 ± 1 RPM
- Depth Adjustment
25 mm to 40 mm
- TEMP. RANGE
Ambient to 50°C
- TEMP. ACCURACY
 ± 1 °C
- TEMP. CONTROL
Thermostat 0-85°C
- REACTION VESSEL
1000ml Jar with Stirrer Pedal and Basket
- HEATER
1 KW
- POWER
230 $\pm 10\%$ VAC, 50Hz.
- DIMENSIONS
330 x 300 x 660 mm (Approx.)
- WEIGHT
9 Kg. (Approx.)
- ACCESSORIES
 - * Main unit with acrylic tank and rectangular cover plate
 - * Reaction Vessel-Capacity 1000 ml
 - * Round acrylic cover plate with hole and a large slit
 - * Stirrer motor with tightening knob
 - * S.S paddle, stirrer shaft with clamp, stainless steel wiremesh basket, glass thermometer, S.S support rod fitted with acrylic block
 - * Instruction Manual





USP/IP Compliant

µP Disintegration Test Apparatus -2901/ 1901

2901

TECHNICAL SPECIFICATIONS

	2901	1901
➤ MODEL	5 Digit LED Display for each of 2 Timers and 3 Digit LED for Temp.	20x4 Line Alphanumeric LCD display with Backlit
➤ DISPLAY	10 soft touch membrane keys	15 soft touch membrane keys
➤ KEYBOARD	3 LED's for Temperature, 2 LED's for Timer and Manual Mode and 1 LED for Set Function	3 LED's for Test status Run, Alarm, End and 1 LED for Heater On/Off Status
➤ LED'S	2 Motors (1 for each Basket)	1 Motor for both Baskets
➤ NO. OF MOTORS	2 Nos. (1 for each Basket)	1 No.
➤ NO. OF TIMERS	----	10 different test setups
➤ SETUP DATA	----	Provision for the attachment of dot-matrix printer with parallel port interface available
➤ PRINTER	----	
➤ SPEED	30 ±1 Strokes per minute	
➤ STROKE HEIGHT	55±1 mm strokes / minute	
➤ RESOLUTION	1 Sec	
➤ RANGE	20°C(Ambient) to 40°C	
➤ ACCURACY	± 0.2 °C	
➤ TEMP. CONTROL	µP based using PT100/ Semiconductor sensor as per IP/USP	
➤ REACTION BEAKERS	1000 ml	
➤ HEATER	0.5 KW	
➤ POWER	230 V AC ± 10%, 50/60 Hz, 44VA	
➤ DIMENSION (LxBxH)	365x375x510 mm approx. (Model 2901)	370x365x495 mm approx. (Model 1901)
➤ WEIGHT	17 Kgs (Model 2901), 9Kg. (Model 1901)	

ACCESSORIES :

Main Unit with Acrylic Tank and Rectangular Cover Plate, Reaction Vessel - Capacity 1000 ml - 2 Nos., Two USP Baskets with 6 Tubes and 6 guided Discs each, External Temperature Sensor, Mains Lead & Dust Cover, Instruction Manual

1901

901

Digital Tablet Disintegration Apparatus - 901 & 904

SALIENT FEATURES

- Digital time output with 1 second resolution
- Accurate time output provided by microprocessor based time totalizer
- Baskets move 'Up and Down' as per IP/USP test specifications
- Temperature controlled by sensitive thermostat

TECHNICAL SPECIFICATIONS

➤ UP AND DOWN SPEED	30 RPM ±2 RPM
➤ ACCURACY	2%
➤ RESOLUTION	1 Sec.
➤ OPERATING TEMP. RANGE	0-50°C
➤ POWER	230 ± 10% VAC 50Hz.
➤ DIMENSIONS	320 x 300 x 450 mm
➤ WEIGHT	8 Kgs. (Approx.)
➤ ACCESSORIES	Double Jar : (901) and single Jar : (904), Dust Cover, Operation Manual
➤ DIMENSIONS	325x290x290 mm, 325x290x325 mm with rods

USP/IP Compliant

Microprocessor Friability Apparatus - 1902/1903

New

1902

SALIENT FEATURES

- Model 1902 - 2 Drums, Model 1903 - 1 Drum
- 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
- RS 232 Printer attachment facility
- Automatically calculates percentage friability
- Loading and unloading of tablets without removing drums
- Power Failure detection facility
- User friendly operation with menus & current status indicators.

TECHNICAL SPECIFICATIONS

➤ TEST METHODS	Time and Count Mode
➤ SPEED OF DRUMS	20 – 60 RPM
➤ NO. OF DRUMS	Model 1902 - 2 Nos., Model 1903 - 1 No.
➤ DISPLAY	20 x 4 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	Attachment of RS232 printer with Serial interface
➤ ELECTRICAL SUPPLY	230 V AC ± 10%, 50/60 Hz, 44VA
➤ DIMENSIONS (WxHxD)	335mm X 330mm X 340mm
➤ WEIGHT	12 Kgs

Digital Friability Test Apparatus - 902/903

902

SALIENT FEATURES

- Sturdy motor to drive drums at constant speed
- Seven segment LED display
- Single & Dual Drum Drive

TECHNICAL SPECIFICATIONS

➤ DISPLAY	3 digit seven segment bright red LED display
➤ ACCURACY	± 1 revolution
➤ RANGE	0-999 revolutions
➤ NO. OF DRUMS	Two (Model 902) One (Model 903)
➤ OPERATING TEMP. RANGE	10°-50°C
➤ POWER	230C± 10% VAC 50 Hz
➤ DIMENSIONS	430 x 220 x 225 mm (Model 902) 325 x 220 x 225 mm (Model 903)
➤ WEIGHT	10 Kg (Approx.)
➤ STANDARD ACCESSORIES	Drum : 2 Nos. (Model 902) : 1 No. (Model 903) Dust Cover : 1 No. Instruction Manual : 1 No.





USP/IP Compliant



1951

Microprocessor Tap Density Tester - 1951

New

SALIENT FEATURES

- Complies with USP, IP specifications
- Extremely useful for pharmaceutical labs
- Microprocessor based, easy to use
- 20 x 4 line alphanumeric LCD display with backlit
- 16 Soft touch membrane type keys
- Independent programmable setups for User & USP mode with storage
- RS 232 Printer attachment facility
- Automatically calculate result parameters like Tap Density, Initial Density, Compressibility Index and Hausner Ratio
- Automatically stores last Result
- Power Failure detection facility
- User friendly operation with menus & current status indicators.

TECHNICAL SPECIFICATIONS

- | | |
|---------------------|---|
| ➤ TEST METHODS | USP-I & USP-II |
| ➤ NO. OF STATIONS | 2 |
| ➤ DISPLAY | 20 x 4 Alphanumeric LCD |
| ➤ KEYBOARD | 16 Soft touch membrane keys, alphanumeric mobile keypad |
| ➤ TAP HEIGHT | USP-I: 14mm ± 2mm, USP-II: 3mm ± 0.3mm |
| ➤ TAPS/MINUTE | USP-I: 300 ± 15, USP-II: 250 ± 15 |
| ➤ NO. OF TAP COUNTS | 1 to 9999 |
| ➤ TYPE OF DRIVE | Direct Drive with Stepper Motor |
| ➤ PRINTER | Attachment of RS232 printer with Serial interface |

ACCESSORIES

- | | |
|--------------------------|---|
| ➤ STANDARD ACCESSORIES | Cylinders 100 & 250ml (1 each) |
| ➤ ELECTRICAL SUPPLY | Cylinder holders for 100 & 250ml (1 each) |
| ➤ DIMENSIONS (W x H x D) | 230V AC ± 10%, 50/60 Hz, |
| ➤ WEIGHT | 360x340x190 mm without holder |
| | 15 Kg. (Approx.), |

Bulk Density Apparatus - 951

951



SALIENT FEATURES

- Extremely Useful for Pharmaceutical Labs
- Highly Accurate and Easy to Operate
- Microcontroller Based Digital Display
- 3 LED's for Status Indication
- Audible Alarm Sound
- Last Count Retention on Power Failure

TECHNICAL SPECIFICATION

- | | |
|------------------|--|
| ➤ DISPLAY | 4 Digit seven Segment Bright Red LED |
| ➤ MAXIMUM COUNTS | 9999 |
| ➤ KEYBOARD | 6 Soft Touch Membrane Keys |
| ➤ CYLINDER | 2 Nos. 50/100 ml Cylinders |
| ➤ DROP HEIGHT | 55 mm (Approx.) |
| ➤ POWER | 230 V 10% AC, 50 Hz |
| ➤ DIMENSIONS | 600 x 450 x 200 mm (Approx.) (L x B x H) |
| ➤ WEIGHT | 12 Kg. (Approx) |
| ➤ ACCESSORIES | 50 ml Cylinders - 2 Nos, Instruction Manual & Dust Cover |

Leak Test Apparatus - 1961/961

TECHNICAL SPECIFICATIONS

- | | |
|---------------------|--|
| ➤ VACUUM RANGE | 150-600mm Hg |
| ➤ VACUUM SETTING | Vacuum can stabilize for a set value less than 400 mmHg ± 10mmHg within 30 Seconds |
| ➤ DESICCATOR'S SIZE | 6", 10" 12" (Please specify while ordering) |
| ➤ DISPLAY | 20x4 line alphanumeric LCD with backlit in model 1961
4 Seven Segment Bright Red LED Display in model 961 |
| ➤ KEY BOARD | Soft Touch Membrane Keys. Alphanumeric mobile keypad in Model 1961, Provision for attaching a PS2 Computer Keyboard is also available in model 1961 |
| ➤ PRINTER | Attachment of DOT Matrix Printer with Cenronics/Parallel interface (Model 1961 only) |
| ➤ SETUPS | 5 Programmable user setups for quick analysis (model 1961 only) |
| ➤ HOLD TIME | 15-999 Secs (in model 1961)
Up to 9999 Secs (in model 961) |
| ➤ POWER | 230V ± 10% AC, 50 Hz |
| ➤ WEIGHT | 13 Kg. (Approx.) |
| ➤ ACCESSORIES | <ul style="list-style-type: none">• Main Apparatus along with vacuum pump• Polycarbonate Desiccator along with connecting tube• Operating Manual |



1961

SALIENT FEATURES

- Extremely Useful for Packing Industry
- Ideal for Leak Testing of Strips, Blisters & Sachets
- Microprocessor Based (Model 1961)
- Programmable Vacuum & Hold Time, Setups (Model 1961)
- Printer attachment Facility (in Model 1961 only)

Auto Melting Point Apparatus - 1935 & 1934

TECHNICAL SPECIFICATIONS

- | | |
|-----------------------|--|
| ➤ TEMPERATURE RANGE | Ambient to 300°C |
| ➤ TEMPERATURE | ± 1°C at 20°C |
| ➤ ACCURACY | ± 2.5°C at 300°C |
| ➤ TEMPERATURE SENSOR | Platinum Resistance PT 100 |
| ➤ RAMP RATE | Programmable at Scale of 1-10 |
| ➤ PLATEAU TEMPERATURE | Programmable |
| ➤ DISPLAY | 4 Digit seven segment LED Display (Model 1935)
3 Digit seven segment LED Display (Model 1934) |
| ➤ DISPLAY RESOLUTION | 0.1°C (Model -1935)
1.0°C (Model - 1934) |
| ➤ KEYBOARD | Soft Touch Membrane Keys |
| ➤ STATUS LED'S | Plateau, °C, Ramp, Run, End, Ready & Recall |
| ➤ MEMORY | Storage up to 100 Results |
| ➤ NUMBER OF SAMPLES | 1 Sample at a time |
| ➤ POWER | AC 230V ± 10%, 50 Hz |
| ➤ WEIGHT | 9.0 Kg. (Approx) |
| ➤ ACCESSORIES | Box of Capillaries, Operation Manual & Dust Cover |



1935

SALIENT FEATURES

- Easy to Operate
- Programmable Plateau Temperature
- Programmable Ramp Rates
- 4 Digit Seven Segment LED Display
- Storage up to 100 Results
- Quick cooling with integrated fan
- Audio Visual Indicators for System Status





Digital Melting Point Apparatus - 2935/935/934

2935



TECHNICAL SPECIFICATIONS

- TFT SCREEN Available with high resolution camera for viewing capillaries (only in Model 2935)
- DISPLAY 4 Digit Seven Segment LED display (Model - 2935)
4 Digit Seven Segment LED display (Model - 935)
3 Digit Seven Segment LED display (Model - 934)
- TEMPERATURE 0-300 °C
- RESOLUTION 0.1°C (Model -2935 & Model - 935)
1°C (Model -934)
- CAPILLARY GLASS TUBE 100mm long, 0.8 to 1.1mm internal diameter
- BOILING POINT 6x75mm Glass Tube
- SAMPLE SIZE Fine powder properly dried at a temperature considerably below its melting point, 4 to 6 mm high
- 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
Controllable with front knob
- STIRRER SPEED 230V ± 10% AC, 50 Hz
- POWER 370 x 290 x 290mm (Model - 2935)
- DIMENSION(LxBxH) 315 x 290 x 290mm (Model - 935 & Model 934)
- WEIGHT 12 Kg. (Approx.)
- 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

935



931

Melting Point Apparatus - 931

TECHNICAL SPECIFICATIONS

- STIRRER SPEED Controllable with front knob
- TEMPERATURE °C 0 - 300 °C
- CAPILLARY GLASS TUBE 100mm long, 0.8 to 1.1mm internal diameter
- SAMPLE SIZE Fine powder properly dried at a temperature considerably below its melting point, 4 to 6 mm high
- 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
- POWER 230 ± 10% VAC, 50 Hz
- DIMENSION 315 x 290 x 290 mm (L x B x H) (Approx.)
- WEIGHT 12 Kg. (Approx.)
- ACCESSORIES
 - Box of Capillaries
 - Boiling Point Tubes - 2 Nos.
 - Thermometer with range 0 - 360 °C
 - Magnetic Capsule
 - Bottle of Silicon Oil
 - Glass Cylindrical Beaker with Teflon cover fitted with immersion heater



Flocculator/Jar Test Apparatus with 6 paddles - 1926

1926



SALIENT FEATURES

- Accepts six samples
- Digital indication of speed and time
- Two pre-set programs
- Built-in illumination for easy viewing of samples

TECHNICAL SPECIFICATIONS

- NO. OF JAR 6
- SPEED RANGE 25 to 200 RPM
- PRE-SET PROGRAMS 2
- TIMER 1 to 99 minutes
- CONTROLS KEYPAD Touch Sensitive
- DIGITAL DISPLAY LED
- POWER 230V, 50Hz, 100W
- DIMENSION (LxBxH) 870 x 265 x 500 mm (Approx.)



1924



Flocculator/Jar Test Apparatus with 4 paddles - 1924

SALIENT FEATURES

- Accepts four samples
- Digital indication of speed and time
- Two pre-set programs
- Built-in illumination for easy viewing of samples

TECHNICAL SPECIFICATIONS

- NO. OF JAR 4
- SPEED RANGE 25 to 200 RPM
- PRE-SET PROGRAMS 2
- TIMER 1 to 99 minutes
- CONTROLS KEYPAD Touch Sensitive
- DIGITAL DISPLAY LED
- POWER 230V, 50Hz, 100W
- DIMENSION (LxBxH) 590 x 265 x 500 mm (Approx.)



1922



Flocculator/Jar Test Apparatus with 2 paddles - 1922

SALIENT FEATURES

- Accepts two samples
- Digital indication of speed and time
- Two pre-set programs
- Built in illumination for easy viewing of samples

TECHNICAL SPECIFICATIONS

- NO. OF JAR 2
- SPEED RANGE 25 to 200 RPM
- PRE-SET PROGRAMS 2
- TIMER 1 to 99 minutes
- CONTROLS KEYPAD Touch sensitive
- DIGITAL DISPLAY LED
- POWER 230V, 50Hz, 100W
- DIMENSION (LxBxH) 310 x 265 x 500 mm (Approx.)





USP/EP Compliant

Tablet Hardness Tester (4 Parameter) - 3958

SALIENT FEATURES

- USP Pharmacopeia and EP Compliant
- Multi-Parameter Measurements
- LCD Display
- Small Footprint
- 'Optional' built in printer
- Sample throughput
- 'Adjustment free' testing jaws
- Over-range alert

New

3958

TECHNICAL SPECIFICATIONS

- DISPLAY Graphic LCD(240 x 128 pixels)
- KEYBOARD Alpha-Numeric Function Keys
- HARDNESS RANGE 5-500N (800N Option Available)
- HARDNESS ACCURACY > 1N
- DIAMETER AND THICKNESS RANGE 0.5 – 35 mm
- DIAMETER ACCURACY > ± 0.05 mm
- MEASURING UNITS Thickness and Diameter in either mm or Inches
- KP RESOLUTION ACCURACY Hardness Measurement in:
 - N(Newton)
 - KP (Kilo Pound, 1KP = 9.81N)
 - Sc (Strong Cobb, 1KP = 1.43Sc)
- TOLERANCE Yes (1/10 or 1/100 Settable)
- FORCE RATE (Programmable Tolerances T1, T2, and plausibility)
- NO. OF TESTS FOR STATISTICS Constant (Linear) Force or Constant (Linear) Speed
- STORED METHODS Up to 100
- CALIBRATION PROCEDURE Up to 10
- CALIBRATION TECHNIQUE Requires 10mm Reference Block and 10kg Reference Weight(Certified)
- DISTANCE VALIDATION No Tilt (User Friendly)
- LOAD CELL LINEARITY 10mm Certified Block (For Thickness and Diameter
- LOAD CELL DIAGNOSTIC CHECK 3-Point Linear Calibration with Certified Weight (5, 10 and 15kg)
- SELF TEST Yes (Check the Load Cell Signal Falls Within Range Before making any further Calibration)
- FAULT LOCALIZATION Yes
- LOAD CELL OVERLOAD PROTECTION Yes (Text Format)
- PASSWORD PROTECTION Yes
- FACTORY SETTING RESET Yes (For Advance Settings)
- NO TABLET DETECTION Yes
- TRACKING DELETION Yes
- ON SCREEN STATISTIC VIEW Yes
- INTERFACE PORTS USB Type A (2), USB Type B, LAN, RS-232 (Serial Port for Balance Connection), Parallel Printer and 40 Column Thermal / Mini Dot Matrix Printer
- DIMENSIONS 22.4" (w) x 14.6"(h) x 14.2"(d) / (57 cm x 37 cm x 36 cm)
- WEIGHT Without Printer: 15.4 lbs. / (7 kg)
- ELECTRICAL POWER With Printer: 17.6lbs./ (8 kg)

230V ± 23V, 50/60 Hz or 115V ± 15V, 50/60 Hz



USP/EP Compliant

Tablet Hardness Tester (3 Parameter) - 3957

SALIENT FEATURES

- USP Pharmacopeia and EP Compliant
- Multi-Parameter Measurements
- LED Display
- Small Footprint
- 'Optional' built in printer
- Sample throughput
- 'Adjustment free' testing jaws
- Over-range alert

New

3957

TECHNICAL SPECIFICATIONS

- DISPLAY LED
- KEYBOARD User Friendly 9 Keys operations
- HARDNESS RANGE 5-500N (800N Option Available)
- HARDNESS ACCURACY > 1N
- DIAMETER & THICKNESS RANGE 1.5 – 35 mm
- DIAMETER ACCURACY > ± 0.05mm
- MEASURING UNITS Thickness and Diameter in either mm or Inches
- FORCE RATE Hardness Measurement in:
 - N(Newton)
 - Measurable Units KP (Kilo Pound, 1KP = 9.81N)
 - Sc (Strong Cobb, 1KP = 1.43Sc)
- NO. OF TESTS FOR STATISTICS Constant (Linear) Force or Constant (Linear) Speed
- STORED METHODS Up to 99
- CALIBRATION PROCEDURE Last test result
- CALIBRATION TECHNIQUE Requires 10mm Reference Block and 10kg Reference Weight(Certified)
- DISTANCE VALIDATION No Tilt (User Friendly)
- LOAD CELL LINEARITY 10mm Certified Block (For Thickness and Diameter
- LOAD CELL DIAGNOSTIC CHECK 3-Point Linear Calibration with Certified Weight (5, 10, and 15kg)
- SELF TEST Yes (Check the Load Cell Signal Falls Within Range Before making any Further Calibration)
- FAULT LOCALIZATION Yes
- LOAD CELL OVERLOAD PROTECTION Yes (Text Format)
- PASSWORD PROTECTION Yes
- FACTORY SETTING RESET Yes (For Advance Settings)
- REAL TIME CLOCK Yes
- NO TABLET DETECTION Yes
- INTERFACE PORTS RS-232(Serial Port for Service Use Only) and Parallel Printer, 40 Column Thermal / Mini Dot Matrix Printer
- DIMENSIONS 22.4" (w) x 14.6"(h) x 14.2"(d) / (57 cm x 37 cm x 36 cm)
- WEIGHT Without Printer: 15.4 lbs. / (7 kg)
- ELECTRICAL POWER With Printer: 17.6lbs./ (8 kg)

230V ± 23V, 50/60 Hz or 115V ± 15V, 50/60 Hz





3956

SALIENT FEATURES

- Compatibility
- Real Time Data Transfer
- Unit Selection & Conversion
- Parameter Measurements
- Sequence Indicators
- LCD with backlit display
- Results Storage

Portable Tablet Hardness Tester - 3956

TECHNICAL SPECIFICATIONS

- | | |
|---|---|
| ➤ DISPLAY | LCD with backlit display |
| ➤ KEYBOARD | User Friendly 9 Keys operations |
| ➤ HARDNESS RANGE | 5-500N |
| ➤ 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 | Up to 10 (also calculate the average value of test results) |
| ➤ ZERO POINT ADJUSTMENT FOR CALIBRATION | Yes |
| ➤ AUTO UNIT CONVERSION | Yes |
| ➤ PROGRAMMABLE T1, T2 TOLERANCE | Yes |
| ➤ TABLET SIZE | 2mm to 28 mm |

New



461

SALIENT FEATURES

- Extremely useful for pharmaceutical Labs
- High accurate and easy to operate
- 3½ Digit Display
- 6 Temperature Probes
- Used for Pyrogen Testing

Digital Tele Thermometer - 461

TECHNICAL SPECIFICATIONS

- | | |
|-----------------|---|
| ➤ RANGE | 0 to 60° C |
| ➤ RESOLUTION | 0.1° C |
| ➤ ACCURACY | 0.2% FS ± 1 Digit |
| ➤ INPUT | RTD (PT-100) or IC Sensor |
| ➤ CHANNELS | 6 channels, switch selectable |
| ➤ REPEATABILITY | ±0.2° C |
| ➤ DISPLAY | 3½ Digit Seven Segment bright red LED |
| ➤ POWER SUPPLY | 230V 10% AC, 50 Hz |
| ➤ DIMENSIONS | 275 x 175 x 76 mm |
| ➤ WEIGHT | 2.5 Kg (Approx.) |
| ➤ ACCESSORIES | Pyrogen Probes (Set of 6 Probes), Operation Manual. Dust Cover. |

pH/Ion Meter - 1016

TECHNICAL SPECIFICATIONS

- | | |
|----------------------------|---|
| pH | |
| ➤ RANGE | -2 to 20.000 pH |
| ➤ RESOLUTION | 0.001 / 0.01 pH (user-selectable) |
| ➤ ACCURACY | ± 0.002 / ±0.01 pH |
| ➤ CALIBRATION | 1 to 5 points (standard buffers) |
| ➤ pH BUFFER SET OPTIONS | USA : pH 1.68, 4.01, 7.00, 10.01, 12.45
NIST: pH 1.68, 4.01, 6.86, 9.18, 12.45
Buf-1: pH 1.68, 4.01, 6.86, 10.01, 12.45
Buf-2: pH 1.68, 4.01, 7.00, 9.18, 12.45
Custom: User Defined Buffer Calibration |
| ➤ RELATIVE STABILITY | ± 0.002 pH/Hour |
| ➤ TEMPERATURE COMPENSATION | -5 to 105° C |

mV/ RELATIVE mV

- | | |
|---------------|--------------------------|
| ➤ RANGE | - 1999.9 to +1999.9 mV |
| ➤ RESOLUTION | 0.1 mV |
| ➤ ACCURACY | ± 0.2 mV |
| ➤ CALIBRATION | mV offset up to ± 150 mV |

TEMPERATURE

- | | |
|---------------|--|
| ➤ RANGE | -5.0 to 105.0 °C; 23.0 to 221.0°F |
| ➤ RESOLUTION | 0.1°C / 0.1°F |
| ➤ ACCURACY | ± 0.3 °C / 0.5°F |
| ➤ CALIBRATION | Automatic Temperature Compensation offset ±5.0°C/ ±9.0°F |
| ➤ SENSOR | Semiconductor Type |

ION CONCENTRATION

- | | |
|--|--|
| ➤ RANGE | 0.001 to 19999 |
| ➤ RESOLUTION (HIGH RESOLUTION MODE: ±500.0 mV) | 0.001 : from 0.001 to 0.999,
0.01 : from 1.00 to 9.99
0.1 : from 10.0 to 99.9, 1 : from 100 to 19999 |
| ➤ RESOLUTION (LOW RESOLUTION MODE: ±1850.0 mV) | 0.001 : from 0.001 to 0.099, 0.01: from 0.10 to 0.99
0.1 : from 1.0 to 9.9, 1 : from 10 to 19999 |
| ➤ ACCURACY | ± 0.5% of full scale for monovalent ions |
| ➤ CALIBRATION | 1% of full scale for divalent ions, 2 to 5 points |
| ➤ MIN / MAX AVERAGE SLOPE | 10 mV/decade / 75mV/ decade |

New



1016

SALIENT FEATURES

- Measures Ion, pH, mV & Temperature
- 20 x 4 line Alphanumeric LCD with backlit
- 20 keys, Soft Touch Membrane Type
- Storage up to 999 Samples
- Attachment for Centronics Dot Matrix Printer
- PS2 keyboard connectivity
- Password protection for calibration
- Printer Attachment Facility
- Calibration due & Measurement alarms
- User friendly & reliable
- Up to 5 point of Calibration with Auto Buffer Recognition
- Automatic error detection facility
- High accuracy & Auto Temperature Compensation



AN ISO 9001 : 2008 CERTIFIED CO.

Digital Photo Fluorometer - 681

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) |

ACCESSORIES

- | | |
|---------------------------------|------------|
| ➤ TEST TUBES | A Set of 5 |
| ➤ DUST COVER | 1 No. |
| ➤ INSTRUCTION MANUAL | 1 No. |
| ➤ PRIMARY AND SECONDARY FILTERS | A Set of 5 |



681

SALIENT FEATURES

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



AN ISO 9001 : 2008 CERTIFIED CO.



Microprocessor pH Meter - 1015

(5 Point Calibration)

1015

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
- Attachment for Serial Dot Matrix / Thermal Printer

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
➤ 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	12V DC using 230V±10% AC Adaptor
➤ PRINTER INTERFACE	External Serial RS232 Dot Matrix Printer Interface
➤ ACCESSORIES	Combination pH Electrode, Temperature Probe, Buffer Tablets 4 pH & 7pH, Electrode Stand, Mains Lead, Instruction Manual, Dust Cover

Microprocessor pH Meter - 1013

1013

TECHNICAL SPECIFICATIONS

PARAMETER	pH	mV	Temp°C
➤ RANGE	-2 to 20.000 pH	0 to 1999.9 mV	0 to 100°C
➤ RESOLUTION	0.001pH	0.1 mV	0.1°C
➤ ACCURACY	±0.001 pH ±1 digit	±0.1mV	±0.1°C
➤ TEMP. COMPENSATION	-5 to 110 °C		
➤ CALIBRATION	Auto/Manual		
➤ AUTO BUFFER RECOGNITION	4.00, 7.00 & 9.20 pH		
➤ READ OUT	128 x 64 dots Graphical LCD Display		
➤ STORAGE	Up to 1000 Samples		
➤ PRINTER ATTACHMENT	External Serial RS232 Dot Matrix Printer Interface		
➤ KEY BOARD	8 Keys Soft Touch Membrane Type		
➤ POWER	12V DC using 230±10% AC Adaptor		
➤ WEIGHT	0.8 Kg. (Approx.)		

New

Microprocessor Based pH System - 1012

1012

TECHNICAL SPECIFICATIONS

PARAMETER	pH	mV	Temp°C
➤ RANGE	-2.00 to 20.00pH	0 to 1999.9mV	0 to 100°C
➤ RESOLUTION	0.01pH	0.1mV	0.1°C
➤ ACCURACY	±0.01 pH ±1 digit	±0.1mV	±0.1°C
➤ TEMP. COMPENSATION	-5 to 110°C (Auto/Manual)		
➤ CALIBRATION	Auto/Manual		
➤ AUTO BUFFER RECOGNITION	4.00 , 7.00 & 9.20 pH		
➤ READ OUT	128 x 64 dots Graphical LCD Display		
➤ ELECTRODE SLOPE	80% to 120%		
➤ STORAGE	Up to 1000 Sample		
➤ PRINTER ATTACHMENT	Through RS 232 for serial printer using 80 column Dot Matrix / Thermal Printer		
➤ KEY BOARD	8 Keys Soft Touch Membrane Type		
➤ POWER	12V DC using 230V ± 10% AC Adaptor		
➤ WEIGHT	0.8 Kg. (Approx.)		

SALIENT FEATURES

- 128 x 64 dots Graphical LCD Display
- Measures pH, mV & Temperature
- Auto Buffer Recognition Facility
- Storage for 1000 Samples
- Attachment for Serial Dot Matrix/ Thermal Printer

Microprocessor Based pH Meter - 1010

1010

TECHNICAL SPECIFICATIONS

GENERAL	
➤ PARAMETERS	pH, mV and Temperature
➤ DISPLAY	7-Segment bright Red LED display (3 for Temperature and 4 for pH/mV)
➤ KEY BOARD	6 keys, soft touch membrane type
➤ POWER SUPPLY	12V DC, using 230V±10% AC Adapter
pH	
➤ RANGE	-2.00 to 20.00 pH
➤ RESOLUTION	0.01 pH
➤ RELATIVE STABILITY	0.02 pH/Hour
➤ ACCURACY	± 0.001 pH ± 1 Digit
➤ TEMP. COMPENSATION	-5 to 110°C
➤ CALIBRATION	Auto (2 or 3 point)
➤ AUTO BUFFER RECOGNITION	4.00, 7.00 & 9.20 pH
➤ ELECTRODE SLOPE	80% to 120%
mV	
➤ RANGE	0 to ± 1999 mV
➤ RESOLUTION	1 mV
➤ ACCURACY	± 1 mV ± 1 digit
TEMPERATURE	
➤ RANGE	-5 to 110 °C
➤ RESOLUTION	0.1°C
➤ ACCURACY	± 0.1°C
➤ SENSOR	Semi-conductor Type
➤ DIMENSIONS	270 x 202 x 80mm (LxBxH)
➤ WEIGHT	0.8 Kg. (Approx.)

STANDARD ACCESSORIES - 1010

- Combined pH Electrode 1 No.
- Temperature Probe 1 No.
- Dust Cover 1 No.
- Instruction Manual 1 No.
- Electrode Stand 1 No.
- Buffer Tablets 4 & 7 pH 2 Nos. each
- Main Lead 1 No.



Digital pH Meter - 101 & 111

101



SALIENT FEATURES

- Measures pH & mV
- Highly Accurate using Micro-controller
- Auto Temperature Compensation Facility (Model 101 only)
- Auto Buffer Recognition
- One Touch Calibration
- Soft Touch Keys
- Up to 3 point Calibration

TECHNICAL SPECIFICATIONS

PARAMETER	pH	mV	TEMP.
➤ RANGE	-2.00 to 20.00 pH	0 to ±1999 mV	- 5 to 110°C (101 only)
➤ RESOLUTION	0.01 pH	1mV	0.1 °C (101 only)
➤ ACCURACY	± 0.01 pH	± 1 mV	± 0.1°C ± 1 digit (101 only)
➤ DISPLAY	3½ Digit LED		
➤ TEMP. COMPENSATION	Auto/Manual: 0 to 100 °C (Model - 101), Manual: 0 to 100°C (Model - 111)		
➤ INPUT IMPEDANCE	> 10 ¹² ohms		
➤ SLOPE CONTROL	80 to 120%		
➤ SENSOR	Combined pH Electrode, Temperature Probe (Model - 101) Combined pH Electrode (Model - 111)		
➤ POWER	12V DC using 230 ± 10% AC Adapter		
➤ DIMENSIONS	270 x 202 x 80 mm (L x B x H)		
➤ WEIGHT	0.8 Kg approx.		

ACCESSORIES

- Combination pH Electrode
- Buffer Tablets 4 pH & 7 pH
- Operation Manual
- Buffer Bottles (4 & 7 pH)
- Temp. Probe (101)
- Dust Cover
- Electrode Stand

Digital pH Meter - alpha 01

alpha 01



TECHNICAL SPECIFICATIONS

PARAMETER	pH	mV
➤ RANGE	0 to 14.00 pH	0 to ±1999 mV
➤ RESOLUTION	0.01pH	1 mV
➤ ACCURACY	± 0.01 pH	± 1 mV
➤ DISPLAY	3½ Digit LED	
➤ TEMP. COMPENSATION	Manual : 0 to 100 °C	
➤ 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 ± 10% AC, 50Hz	
➤ DIMENSIONS	275 x 175 x 76 mm (L x B x H)	
➤ SENSOR	Combined pH Electrode	
➤ ACCESSORIES	* Combination pH Electrode * Buffer Tablets 4 pH & 7 pH * Operation Manual * Buffer Bottles (4 pH & 7 pH) * Dust Cover * Electrode Stand	

SALIENT FEATURES

- Measures pH & mV
- Highly Stable and Accurate
- 3½ Digit Display
- Auto Polarity & Decimal Indication

New

New

1615

µP Based pH-EC-TDS Meter - 1615



TECHNICAL SPECIFICATIONS

PARAMETER	pH	EC	TDS	TEMP.
➤ RANGE SEL.	----	Automatic	Automatic	----
➤ RANGE	-2.00 to 20.00pH	0-20, 0-200 µS 0-2, 0-20, 0-200 mS	0-20, 0-200 ppm 0-2, 0-20, 0-200ppt	-5 to 110°C
➤ ACCURACY	0.01pH ± 1 Digit	± 0.5% FS ± 1 Digit	± 0.5%FS± 1 Digit	± 0.1 °C
➤ RESOLUTION	0.01pH	0.01µS	0.01 ppm	0.1 °C
➤ CELL CONST	----	Adjustable (0.05-10.5)	Adjustable (0.05-10.5)	----
➤ TEMP. COMP.	Auto/Manual (0-100 °C)	Auto/Manual 0-50°C	Auto/Manual 0-50°C	----
➤ TEMP. COEFF.	----	Adjustable (0.1- 4.0%)	Adjustable (0.1- 4.0%)	----
➤ AUTO BUFFER	4.00, 7.00, 9.20pH	----	----	----
➤ READOUT	128 x 64 dots Graphical LCD Display			
➤ KEY BOARD	8 Soft touch membrane type keys			
➤ PRINTER	RS 232 for serial printer using 80 column Dot Matrix/Thermal Printer			
➤ STORAGE	up to 1000 Samples			
➤ POWER	12V DC using 230V ± 10% AC Adaptor			
➤ DIMENSIONS	270 x 202 x 80 mm (LxBxH)			
➤ WEIGHT	0.8 Kg (Approx)			

SALIENT FEATURES

- 128 x 64 dots Graphical LCD Display
- pH, EC, TDS & Temp. Measurements
- Auto Temperature Compensation
- Auto Buffer Recognition in pH Mode
- Auto Ranging Facility in EC/TDS Modes
- Programmable Ref. Temp & Temp. Coefficients in EC Mode
- 1000 Samples Storage Facility
- Attachment for Serial Dot Matrix/ Thermal Printer

ACCESSORIES

- * pH Combination Electrode,
- * Electrode Stand, Dust Cover,
- * Instruction Manual, Mains Lead
- * pH Buffer tablets (4.00 & 7.00 pH)
- * Conductivity/TDS Cell, Temp. Probe,

Microprocessor Based pH-EC Meter - 1611

TECHNICAL SPECIFICATIONS

PARAMETER	pH	EC	TEMP.
➤ RANGE SEL.	----	Automatic	----
➤ RANGE	-2 to 20pH	0-20, 0-200µS 0-2, 0-20, 0-200 mS	-5 to 110°C
➤ ACCURACY	0.01pH ± 1 Digit	± 0.5% FS	± 1 Digit ± 0.1 °C
➤ RESOLUTION	0.01pH 0.01 µS	0.1 °C	
➤ CELL CONST.	----	Adjustable (0.05-10.5)	----
➤ TEMP. COMP	Auto/Manual (0-100 °C)	Auto/Manual (0-100°C)	----
➤ TEMP. COEFF	----	Adjustable(0.1- 4.0%)	----
➤ AUTO BUFFER	4.00, 7.00, 9.20 pH	----	----
➤ READOUT	128 x 64 dots Graphical LCD Display		
➤ STORAGE	up to 1000 Samples		
➤ KEY BOARD	8 Soft touch membrane type keys		
➤ PRINTER	Through RS 232 for serial printer using 80 column Dot Matrix Printer		
➤ POWER	12V DC using 230V ± 10% AC Adaptor		
➤ DIMENSIONS	270 x 202 x 80mm (LxBxH)		
➤ WEIGHT	0.8 Kg (Approx.)		

1611





1602

µP Based EC-TDS-Sal Meter - 1602

TECHNICAL SPECIFICATIONS

PARAMETER	EC	TDS	SALINITY	TEMP.
➤ RANGE SEL.	Automatic	Automatic	Automatic	---
➤ RANGE	0-20, 0-200µS	0-2, 0-20, 0-200ppm	0-20, 0-200ppm	0-100°C
	0-2, 0-20, 0-200mS	0-20, 0-200 ppt	0-2, 0-20, 0-50ppt	
➤ ACCURACY	± 0.5%FS±1Digit	±0.5%FS±1Digit	±1% FS± 1Digit	± 0.1°C
➤ RESOLUTION	0.01 µS	0.01 ppm	0.01 ppm	0.1°C
➤ CELL CONST	Adjustable (0.05-10.5)	Adjustable (0.05-10.5)	Adjustable (0.05-10.5)	---
➤ TEMP. COMP	Auto/Manual 0-50°C	Auto/Manual 0-50°C	Auto/Manual 0-50°C	---
➤ TEMP. COEFF.	Adjustable (0.1 - 4.0%)	Adjustable (0.1 - 4.0%)	Adjustable (0.1 - 4.0%)	
➤ READOUT	128x64 dots Graphical LCD Display			
➤ KEY BOARD	8 Soft touch membrane type keys			
➤ PRINTER	RS232 for serial printer using 80 column dot matrix printer			
➤ STORAGE	Up to 1000 Samples			
➤ POWER	12V DC using 230V ± 10% AC Adaptor			
➤ ACCESSORIES	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



1601

µP Conductivity/TDS Meter - 1601

SALIENT FEATURES

- Provision for variable reference temperature & temperature coefficient.
- Facility for measurement of absolute cell constant. Adjustment of cell constant from 0.05 to 10.5
- Measures Conductivity, TDS & Temperature
- Temperature compensation from 0 to 50°C (Auto/Manual)
- Sample storage of 1000 samples
- Printer attachment facility

TECHNICAL SPECIFICATIONS

➤ PARAMETER	CONDUCTIVITY	TDS	TEMP.
➤ RANGE SELECTION	Automatic	Automatic	-
➤ RANGE	0-20, 0-200µS	0-20, 0-200 ppm	0-100°C
	0-2, 0-20, 0-200mS	0-2, 0-20, 0-200ppt	
➤ ACCURACY	±0.5%fs±1Digit	±1% FS±1Digit	±0.1°C
➤ RESOLUTION	0.01µS	0.01ppm	0.1°C
➤ CELL CONSTANT	Adjustable (0.05-10.5)	Adjustable (0.05-10.5)	-
➤ TEMP. COMPENSATION	0-100°C (Auto/Manual)	0-100°C (Auto/Manual)	-
➤ TEMPERATURE COEFFICIENT	Adjustable (0.1-4.0%)	Adjustable (0.1-4.0%)	-
➤ READOUT	128x64 dots graphical LCD Display		
➤ STORAGE	Up to 1000 Samples		
➤ KEY BOARD	8 Soft Touch Membrane Type Keys		
➤ PRINTER	RS 232 for serial printer using 80 column dot matrix printer		
➤ POWER	12V DC using 230V ± 10% AC Adaptor		

CONDUCTIVITY APPLICATIONS (Industry)

- Iron & Steel
- Brewing & Beverage
- Food Processing
- Paper Industry
- Water Production
- Pharmaceuticals



601

Digital Conductivity Meter - 601, 602 & 611

TECHNICAL SPECIFICATIONS

MODEL	601	602	611
➤ DISPLAY	3½ Digit LED	3½ Digit LED	3½ Digit LED
➤ MEASUREMENT	Conductivity & Temperature	Conductivity & Temperature	Conductivity
➤ COND. RANGES	Five Ranges - 0 - 200 µS/cm 0 - 2 mS/cm 0 - 20 mS/cm 0 - 200 mS/cm 0 - 1000 mS/cm	Six Ranges 0 - 20 µS/cm 0 - 200 µS/cm 0 - 2 mS/cm 0 - 20 mS/cm 0 - 200 mS/cm 0 - 1000 mS/cm	Five Ranges - 0 - 200 µS/cm 0 - 2 mS/cm 0 - 20 mS/cm 0 - 200 mS/cm 0 - 1000 mS/cm
➤ RANGE SELECTION	Automatic in 5 Ranges -5 to 110°C	Automatic in 6 Ranges -5 to 110°C	Automatic in 5 Ranges -5 to 110°C
➤ TEMP. RANGE			
➤ ACCURACY	COND. ±0.5 % FS ± 1Digit TEMP. ±0.1°C ± 1Digit	COND. ±0.5 % FS ± 1Digit TEMP. ±0.1°C ± 1Digit	COND. ±0.5 % FS ± 1Digit TEMP. -
➤ TEMPERATURE COMPENSATION	Auto: 0 to 50 °C Manual: 0 to 50 °C	Auto: 0 to 50 °C Manual: 0 to 50 °C	Manual: 0 to 50°C
➤ CELL CONSTANT	Adjustable on Digital Display		
➤ MEASURING CELL	Platinum DIP Type		
➤ CELL CONST. MEASUREMENT	Auto	Auto	Auto
➤ RESOLUTION	COND. 0.1µS/cm TEMP. 0.1°C	COND. 0.01µS/cm TEMP. 0.1°C	COND. 0.1µS/cm TEMP. -
➤ POWER	12V DC using 230V± 10% AC Adapter		
➤ DIMENSIONS	270x202x80 mm (lxbxh)		
➤ WEIGHT	0.8 Kg approx.		
➤ ACCESSORIES	Conductivity Cell, Operation Manual, Dust Cover, Cell Stand, Temperature Probe (with models 602 and 601)		

SALIENT FEATURES

- Microcontroller Based
- Highly Stable & Accurate
- Auto Ranging Facility
- Cell Constant Measurement and Adjustment Facility
- 3½ Digit Display
- Automatic Temperature Compensation Facility(601, 602 only)



alpha 06

Digital Conductivity Meter - alpha 06

TECHNICAL SPECIFICATIONS

➤ DISPLAY	3½ Digit LED
➤ RANGE	0 to 200µS/cm 0 to 2 mS/cm 0 to 20 mS/cm 0 to 200 mS/cm 0 to 1000 mS/cm
➤ RESOLUTION	0.1 µS/cm
➤ ACCURACY	±1% FS ±1Digit
➤ TEMP. COMPENSATION	Manual : 0 to 50°C
➤ CELL CONSTANT	Adjustable on Digital Display
➤ MEASURING CELL	Platinum DIP Type
➤ POWER	230V ±10% AC, 50 Hz
➤ DIMENSIONS	76x275x175 mm (L x B x H)
➤ ACCESSORIES	Conductivity Cell, Operation Manual, Dust Cover

New



641

SALIENT FEATURES

- Micro-controller Based
- Measures Conductivity and TDS
- Auto Ranging Facility
- Auto Cell Constant Measurement
- 3½ Digit Display

Digital Conductivity / TDS Meter - 641

TECHNICAL SPECIFICATIONS

- PARAMETER
- RANGES

Conductivity

Five Ranges
0 - 200 μ S/cm
0 - 2 mS/cm
0 - 20 mS/cm
0 - 200 mS/cm
0 - 1000 mS/cm
Automatic
0.1 μ S/cm in lowest range

TDS

Five Ranges
0 - 200 ppm
0 - 2 ppt
0 - 20 ppt
0 - 200 ppt
0 - 1000 ppt
Automatic
0.1 ppm in lowest range

- RANGE SELECTION
- RESOLUTION
- ACCURACY
- DISPLAY
- CELL CONSTANT
- TEMP. COMPENSATION
- AUTO CELL CONSTANT MEASUREMENT
- MEASURING CELL
- POWER
- DIMENSIONS
- WEIGHT
- ACCESSORIES

Platinum DIP Type
12V DC using 230V $\pm$ 10% AC Adapter
270 x 202 x 80 mm (l x b x h approx.)
0.8 Kg approx.
Conductivity/TDS Cell , Operation Manual, Cell Stand, Dust Cover, 12V Adapter



651

SALIENT FEATURES

- Microcontroller Based
- Auto Ranging Facility
- Auto Cell Constant Measurement
- 3½ Digit Display
- Measures TDS and Temperature (model 652 only)
- Automatic Temperature Compensation(model 652 only)

Digital TDS Meter - 651/652

TECHNICAL SPECIFICATIONS

- DISPLAY
- PARAMETERS
- RANGES

3½ Digit Bright Red LED Display
TDS & Temperature (Model 652)
TDS (Model 651)
TDS: 0-200 ppm, 0-2 ppt, 0-20 ppt, 0-200.0 ppt, 0-1000 ppt
Temperature: 0 to 110°C (Model 652 Only)

- RANGE SELECTION
- RESOLUTION

Automatic
TDS : 0.1 ppm, Temp: 0.1°C (Model 652)
TDS : 0.1 ppm (Model 651)

- ACCURACY

TDS : $\pm$ 0.5 % FS $\pm$ 1Digit, Temp: $\pm$ 0.1°C $\pm$ 1Digit (Model 652)
TDS : $\pm$ 0.5 % FS $\pm$ 1Digit (Model 651)

- TEMP. COMPENSATION

Auto/Manual : 0 to 50°C (Model 652)
Manual : 0 to 50°C (Model 651)

- CELL CONSTANT

Adjustable on Digital Display

- AUTO CELL CONSTANT

Available using standard solution

- MEASURING CELL

Platinum DIP Type

- DIMENSIONS

270 x 202 x 80 mm (LxBxH) approx.

- WEIGHT

0.8 Kg approx.

- POWER

12V DC using 230V $\pm$ 10% AC Adapter

- ACCESSORIES

TDS Cell , Operation Manual, Cell Stand, Dust Cover, 12V Adapter
Temperature Probe(only in 652)



181

APPLICATIONS (Industry)

- Iron & Steel
- Brewing & Beverage
- Food Processing
- Papermaking
- Water Production
- Pharmaceuticals

Digital pH, Cond. & Temp. Meter - 181

TECHNICAL SPECIFICATIONS

GENERAL

- DIGITAL DISPLAY
- POWER
- DIMENSIONS
- WEIGHT

3½ digit LED
230V AC $\pm$ 10% 50Hz.
275 x 190 x 78 mm
2.5 Kg. (Approx.)

PARAMETERS

pH

- RANGE
- RESOLUTION
- ACCURACY
- INPUT IMPEDANCE
- TEMP. COMPENSATION
- SLOPE CORRECTION

0 - 14pH
0.01pH
 $\pm$ 0.01 pH $\pm$ 1 digit
 $>10^{12}$ ohms
ATC
80 to 120%

CONDUCTIVITY

- RANGE
- ACCURACY
- RESOLUTION
- OSCILLATOR
- CELL CONSTANT
- TEMP. COMPENSATION

0 to 20 mS/cm in 2 ranges
 $\pm$ 0.5% $\pm$ 1digit
1 μ S/cm
1KHz in-built
0.2 to 1.8 adjustable directly on digital display
ATC

TEMPERATURE

- RANGE
- RESOLUTION
- ACCURACY
- SENSOR

0 - 100°C
0.1°C
 $\pm$ 0.2% $\pm$ 1digit
Semiconductor Probe



alpha 05

Digital TDS Meter - alpha 05

SALIENT FEATURES

- Highly Stable & Accurate
- Cell Constant Adjustment Facility
- 3½ Digit Display

TECHNICAL SPECIFICATIONS

- DISPLAY
- MEASUREMENT
- RANGE

3 ½ Digit LED
TDS
0 To 200 ppm
0 to 2.000 ppt
0 to 20.00 ppt
0 to 200.0 ppt
0 to 1000 ppt

- RESOLUTION

0.1 ppm

- ACCURACY

$\pm$ 1% FS $\pm$ 1 Digit

- TEMP. COMPENSATION

Manual : 0 to 50°C

- CELL CONSTANT

Adjustable on Digital Display

- MEASURING CELL

Platinum DIP Type

- POWER

230V $\pm$ 10% AC, 50 Hz

- DIMENSIONS

76x275x175 mm (L x B x H)

- ACCESSORIES

TDS Cell , Operation Manual, Dust Cover, Cell Stand

New



671



Digital Salinity Meter - 671

SALIENT FEATURES

- Microcontroller Based
- Auto Ranging Facility
- Auto Cell Constant Measurement
- 3½ Digit Display

TECHNICAL SPECIFICATIONS

- | | |
|---------------------------|---|
| ➤ DISPLAY | 3½ Digit Bright Red LED Display |
| ➤ MEASUREMENT | Salinity |
| ➤ RANGES | 0 - 2.000 ppt, 0 - 20.00 ppt, 0 - 50.0 ppt |
| ➤ RANGE SELECTION | Automatic |
| ➤ ACCURACY | ±0.5 % FS ± 1 Digit |
| ➤ TEMP. COMPENSATION | Manual : 0 to 50 °C |
| ➤ CELL CONST. MEASUREMENT | Automatic, using standard solution |
| ➤ MEASURING CELL | Platinum Dip Type |
| ➤ RESOLUTION | 0.001 ppt |
| ➤ POWER | 12V DC using 230V± 10% AC Adapter |
| ➤ DIMENSIONS | 270 x 202 x 80 mm (l x b x h approx.) |
| ➤ WEIGHT | 0.8 Kg approx. |
| ➤ ACCESSORIES | Salinity Cell , Operation Manual, Cell Stand, Dust Cover, 12V Adapter |

Digital Turbidity Meter - 335

335

SALIENT FEATURES

- 3½ Digit LED Display
- Measurements up to 1000 NTU in 4 Ranges
- Reliable & Accurate Results
- Best Suitable for Sewage and Drinking Water Testing

TECHNICAL SPECIFICATIONS

- | | |
|-----------------|--|
| ➤ DISPLAY | 3½ Digit LED Display |
| ➤ DETECTOR | Photodiode |
| ➤ RANGE | 0 to 1000 NTU in 4 ranges |
| | 0-2, 20, 200 & 1000 NTU |
| ➤ RESOLUTION | 0.01 NTU |
| ➤ ACCURACY | ±3% FS |
| ➤ SAMPLE SYSTEM | 60 x 25mm Clear Glass Test Tube |
| ➤ LIGHTSOURCE | LED |
| ➤ POWER | 230V AC ± 10%, 50Hz. |
| ➤ DIMENSIONS | 280 x 175 x 110 mm (Approx.) |
| ➤ WEIGHT | 3.0 Kg |
| ➤ ACCESSORIES | Test Tube Set of 5 : 1 Set
Operation Manual : 1 No.
Dust Cover : 1 No. |



331

APPLICATIONS

- Natural Waters
- Sewage Wastes
- Medical, Biomedical & Microbial Studies
- Agriculture
- Foods & Drugs
- Boiler Feed Water



Digital Turbidity Meters - 331/341

SALIENT FEATURES

- Display - 3½ digit LED
- 30mm flat bottom Test Tube
- Range 0 - 1000 NTU (in Model 331)
- Ranges 0 - 200 NTU (in Model 341)
- Highly Stable & Accurate

TECHNICAL SPECIFICATIONS

- | | | |
|-----------------|---|----------------------------|
| ➤ Product | Digital Turbidity Meter (331) | Digital Nephelometer (341) |
| ➤ 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 ±1digit | ±2% FS ±1digit |
| ➤ 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 | |

Microprocessor DO Meter - 1801

1801

SALIENT FEATURES

- Microcontroller Based
- Highly Sensitive & Accurate
- Range - 0 to 20 ppm
- 1000 Sample Storage Memory
- Manual / Auto Temperature Compensation
- Printer Interface Available

TECHNICAL SPECIFICATIONS

- | | |
|----------------------|--|
| ➤ DISPLAY | 16x2 Line LCD display with backlit |
| ➤ RESOLUTION | DO: 0.1 ppm, Temp.: 0.1°C |
| ➤ ACCURACY | DO ±0.2 ppm, Temp. ±0.2°C |
| ➤ CALIBRATION | Automatic |
| ➤ TEMP. COMPENSATION | Auto/Manual 0 to 100°C |
| ➤ STORAGE | Up to 1000 Samples |
| ➤ KEY BOARD | 8 Soft Touch Membrane Type Keys |
| ➤ PRINTER | Provision for attachment of dot matrix printer with Centronics interface |
| ➤ POWER | 230V ± 10%, 50Hz. AC |
| ➤ WEIGHT | 2.5 Kg (Approx.) |



801

Digital Dissolved Oxygen Meter - 801 & 811

SALIENT FEATURES

- Manual temperature compensation
- Available with magnetic stirrer (801)
- Temperature indication (801)
- Highly sensitive & stable

TECHNICAL SPECIFICATIONS

- DISPLAY 3½ Digital Bright Red LED
- RANGE DO 0 to 20 ppm TEMPERATURE 0 to 60°C (801)
- RESOLUTION DO 0.1 ppm TEMPERATURE 0.1°C (801)
- ACCURACY DO ±0.1 ppm TEMPERATURE ±0.2°C (801)
- TEMP. COMPENSATION Manual 0 to 50°C
- CALIBRATION Manual
- ACCESSORIES Gold/Silver Amperometric DO Probe, Set of DO Membranes, Dust Cover, Operation Manual, Temperature Probe (801), Magnetic Stirrer & Capsules (801)

pH/Cond./TDS/Salt/Temp. Waterproof Tester - 7200

TECHNICAL SPECIFICATIONS

- DISPLAY Large LCD to display parameters, Battery level, ATC & Temperature
- RANGE pH: -2 to 16.00 TDS: 0 to 1300 ppm, Cond.: 0 to 2000 µS, 1.30 - 13.00 ppt 2.00 - 20.00 mS mV: -1000 to +1000mV Salt: 0 to 1000 ppm, Temp.: 0 to 90.0°C 1.00 to 12.00ppt 32 to 194.0°F
- RESOLUTION pH: 0.01pH, mV : 1 mV, TDS: 1 ppm/0.01 ppt, Cond.: 1 µS/0.01mS Temp.: 0.1°C/°F, Salt : 1 ppm/0.01 ppt
- TEMP. COMP Automatic Temp. Compensation (ATC) with temp. display
- TEMP. COEFF. 2% per °C
- SENSOR User Replaceable
- WATER PROOF As per IP - 57 water proofing standard
- CALIBRATION pH : 4.00, 7.00, 10.01 Cond. : 0 µS, 1413µS, 12.88 mS
- POWER DC 1.5 V x 4 Battery (UM-4/AAA) Auto Power off after 10 minutes

SALIENT FEATURES

- Push Button Calibration, Water-proof IP-57, Temperature coefficient - 2% per °C, Self-Diagnostics message for low battery.
- Auto Power-off after 10 minutes, Hold Function to freeze reading.



7021

Cond./TDS/Salt/Temp. Waterproof Tester - 7021

TECHNICAL SPECIFICATIONS

- DISPLAY Large LCD to display parameters, ATC, Temp. & Battery level,
- RANGE TDS: 0 to 1300 ppm, Cond.: 0 to 2000 µS, 1.30 - 13.00 ppt 2.00 - 20.00 mS Salt: 0 to 1000 ppm, Temp.: 0 to 90.0°C 1.00 - 12.00 ppt 32 to 194.0°F
- RESOLUTION TDS/Salt : 1 ppm/0.01 ppt Cond. : 1 µS/0.01 mS Temp.: 0.1°C/°F
- TEMP. COMP. Automatic Temp. Compensation (ATC) with temp. display
- TEMP. COEFF. 2% per °C
- SENSOR User Replaceable
- WATERPROOF As per IP - 57 water proofing standard
- TDS FACTOR 0.67
- POWER DC 1.5 V X 4 Battery (UM-4/AAA), Auto Power off after 10 minutes
- ACCESSORIES Standard Calibration Solution (50 ml), Battery, Lanyard, Instruction Manual and Carrying Case

pH/mV/Temp. Waterproof Tester - 7011

SALIENT FEATURES

- Push Button Calibration, Water-proof IP-57, Temperature coefficient 2% per °C, Self-Diagnostics message for low battery.
- Auto Power-off after 10 minutes, Hold Function to freeze reading.

TECHNICAL SPECIFICATIONS

- DISPLAY Large LCD to display ATC, Temp. & Battery level
- RANGE pH : -2 to 16.00 mV : -1000 to +1000mV Temp.: 0 to 90°C
- RESOLUTION pH : 0.01 pH mV : 1 mV Temp.: 0.1°C/°F
- TEMP. Automatic Temp. Compensation (ATC) with Temp. display
- SENSOR User Replaceable
- WATERPROOF As per IP - 57 water proofing standard
- CALIBRATION 4.00, 7.00, 10.01
- POWER DC 1.5 V X 4 Battery (UM-4/AAA), Auto Power off after 10 minutes
- ACCESSORIES Standard Calibration Solution (50 ml), Battery, Lanyard, Instruction Manual and Carrying Case





1160



172

SAILIENT FEATURES

	1160	172	161	191
pH	✓	✓	✓	✓
Cond.	✓	✓	✓	✓
TDS	✓	✓	✓	✓
DO	✓	✓	✓	✓
mV (ORP)	✓	✓	✓	✓
Salinity	✓	✓	✓	✓
Turbidity	✓	✓	✓	✓
Colorimeter	✓	✓	✓	✓
Temp.	✓	✓	✓	✓



161



191

WATER & SOIL ANALYSIS KITS

SPECIFICATIONS



Model	1160	161	191	172
Product	µP Water & Soil Analysis Kit	Water & Soil Analysis Kit	Water & Soil Analysis Kit	Water & Soil Analysis Kit
Display	16 x 2 Characters LCD Display	3 ½ Digit LCD	3 ½ Digit LCD	3 ½ Digit LCD
pH				
Range	0 to 14 pH	0 to 14 pH	0 to 14 pH	0 to 14 pH
Resolution	0.01 pH	0.01 pH	0.01 pH	0.01 pH
Accuracy	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)
Conductivity (E C)				
Range	0-20, 0-200µS 0-2, 0-20, 0-200mS	0-200µS 0-2, 0-20, 0-200mS	0-20mS	0-20mS
Resolution	0.01µS/cm	0.1µS	0.01mS (10µS)	0.01mS (10µS)
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
Cell Constant	Adjustable (0.05 to 10.5)	Adjustable (0.4 to 1.5)	Pre-Adjusted	Pre-Adjusted
Temp. Coefficient	Adjustable (0.4 to 4.0)	2%	2%	2%
Temp. Comp.	5-50° (Auto/Manual)	Adjustable from table	Adjustable from Table	Adjustable from Table
Reference Temp.	Selectable (5-50°C)	25°C	25°C	25°C
Temperature				
Range	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
Accuracy	± 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
TDS				
Range	0-20, 0-200ppm 0-2, 0-20, 0-200 ppt.	0-200ppm 0-2, 0-20, 0-200 ppt.	0-20 ppt	0-20 ppt
Range Selection	Automatic	Manual	---	---
Resolution	0.01 ppm	0.1 ppm	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
Cell Constant	Adjustable (0.05 to 10.5)	0.4 to 1.5 on display	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 ± 1 Digit	0.1 ppm ± 1 Digit	0.5 ppm ± 1 Digit	0.5 ppm ± 1 Digit
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	Gold/Silver Amperometric Probe
mV (ORP)				
Range	0 to ± 1999.9 mV	0 to ± 1999 mV	---	---
Resolution	0.1 mV	1 mV	---	---
Accuracy	± 0.1 mV ± 1 digit	± 1 mV ± 1 digit	---	---
Turbidity				
Range	---	---	0-1000NTU	0-1000NTU
Resolution	---	---	1 NTU	1 NTU
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, 0-50ppt	0 - 50 ppt	0 - 50 ppt	0 - 50 ppt
Resolution	0.01 ppm	0.1 ppt	0.1 ppt	0.1 ppt
Accuracy	± 1% of Range ± 1 Digit	± 0.5% FS ± 1 Digit	± 0.5% FS ± 1 Digit	± 0.5% FS ± 1 Digit
Colorimeter				
Range	---	---	---	Abs. 0-1.99 A,
Filters	---	---	---	Filters - 5 Nos.
Resolution	---	---	---	Resolution - 0.01 Abs.
Power Supply	6V Rechargeable Battery or 230V±10%AC, 50Hz	1.5Vx6Dry Cells or 230V±10%AC, 50Hz	12V Rechargeable Battery or 230V±10%AC, 50Hz	12V Rechargeable Battery or 230V±10%AC, 50Hz
Storage	1000 sample	---	---	---
Standard Accessories pH Electrode, Cond./TDS/Salinity Cell, Temp. Probe, DO Probe, Dry Cell container (161), Main Lead, Operation Manual, Bottles for pH Solution & pH Tablets Bottles (161 & 191), Turbidity Test Tube Set (191)				



131



621

SAILIENT FEATURES

	131/132	621	661	831
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 (Eveready 216 or equ.)	9V DC (Eveready 216 or equ.)	9V DC (Duracell battery or equ.)	9V DC (Eveready 216 or equ.)
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.)



661



831



NSIC

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