Screw Gauge

KS/PHY/SG

Manual, least count 0.01mm, size 25x1/100mm, Stainless Steel, measuring range 25mm





Spherometer

Brass dial head 40 mm in diameter, divided and marked in 100 divisions. Vertical scale of 10-0-10 mm. Fitted on tripod stand, distance between legs 40 mm.





Travelling microscope Vertical and horizontal movement

KS/PHY/TMV&HM

Vertical and horizontal movement, portable, Horizontal scale: 18 cm divided at 1mm interval, Vertical scale: 16cm divided at 1mm interval, Screw gauge dial: 100 divisions with a least count of 0.01mm , 10X Ramsden Eyepiece with fine cross wire, focal length 25 cm





Compound Pendulum

KS/PHY/CM

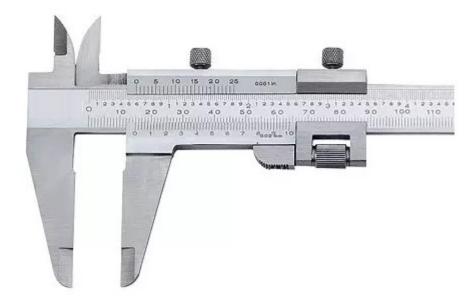
It consists of a powder coated steel bar of dimension 100×3.75×0.6cm with a number of equidistant holes drilled along its length at equal intervals of 5cm. The pendulum is provided with two removable knife edges passing through any one of the holes. Complete set up.





Vernier Calipers

Measuring Range: 0-150 millimetre or 0-6 inch Resolution: 0.01 millimetre or 0.0005 inch. Repeatability: 0.01 millimetre or 0.0005 inch. Maximum measurement speed: 1m/s



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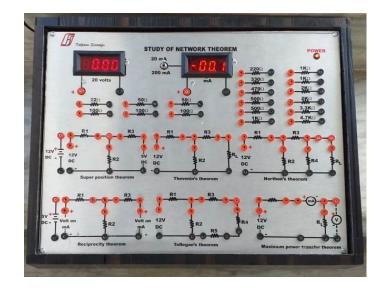


KS/PHY/VC

Network Theorem: Mounted on a Board with Sufficient Connecting Wires

KS/ELE/NT

Complete set up mounted on a board with sufficient connecting wires with the aim to "study the Thevenin theorem, Norton's theorem and maximum power transfer theorem".





LCR Resonance Circuit: Mounted on a Board with Sufficient Connecting Wires

KS/ELE/LCR

Complete set up mounted on a board with sufficient connecting wires with the aim "to study the LCR resonance circuit.





JFET: Complete Set Up Mounted on a Board with Sufficient Connecting Wires

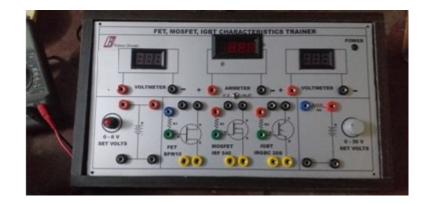
KS/ELE/JFET

Complete set up mounted on a board with sufficient connecting wires with the aim "to study the drain characteristics of a JFET.





Complete set up mounted on a board with sufficient connecting wires with the aim "to study the drain characteristics of a MOSFET".





KS/PHY/PN

Complete set up mounted on a board with sufficient connecting wires with the aim "to study the forward and reverse characteristics of a P/N junction diode".





DSO 50 MHZ,2 channel: with BNC cable

•Complete set up with the aim "Bandwidth : 50 MHz, 2

Channel, 7 inch High Resolution LCD, SCPI and Lab View supported, Sample Rate : 1 GSA/s, Ultra-thin body".



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KS/MIS/DSO

KS/MIS/SWA

Stop Watch (Analog)

Mechanical (Without battery operation) Precision 1/100th of a second Shock Resistant body





Stop Watch (Digital)

Digital Precision 1/100th of a second, Plastic Material, battery (Non-rechargeable) Backlight, Time Format 12 and 24 hr.



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KS/MIS/SWD

KS/PHY/SCWVW

Complete set up with varying weights with the aim "To determine the force constant of a flat spiral spring by statical method".





Helmholtz Galvanometer Method: With Sufficient Connecting Wires

KS/PHY/HG

Complete set up with sufficient connecting wires with the aim "To measure the spatial distribution of the magnetic field between a pair of identical coils in Helmholtz arrangement with power supply, digital gauss meter, two coils of minimum diameter 150 mm, support base, support rod, deflection compass, digital millimeter".





Young's modulus by Searle's Method: With Sufficient Connecting Wires

KS/PHY/YMBSM

Complete set up with sufficient connecting wires with the aim "to determine the young's modulus, modulus of rigidity, and poison's ratio for the material of a wire by Searle's method".

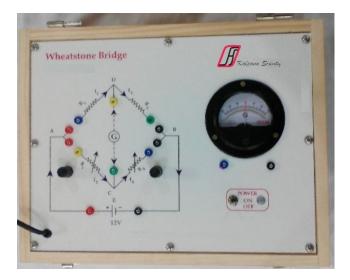




Wheat Stone Bridge: Mounted on a Board with Sufficient Connecting Wires

KS/ELE/WHTB

Complete set up mounted on a board with sufficient connecting wires with aim "To determine the unknown resistance by wheat stone bridge".

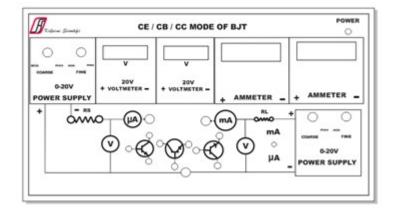




Fixed Bias and Voltage divider CE Mode: Mounted on a Board with Sufficient Connecting Wires

KS/ELE/FBVDCE

Complete set up mounted on a board with sufficient connecting wires with the aim "To study the static characteristics of a transistor in fixed bias and voltage divider CE mode".





KS/MIS/TAB

Table: Length 6 feet X Width 3 feet X Height 3 feet

Metallic frame with powder coating for corrosion resistance. Wooden top with solid wood of thickness 1 inch and chemical resistant coating. Length 6ft x width 3ft x height 3ft. Load bearing capacity 1000 kg.





Square shaped, four legs, wooden, thickness of the top 1 inch. Height 3ft, Load bearing capacity =200 kg.





Computer with Printer and UPS for Physics Laboratory

KS/MIS/PCSET

Processor (13th generation i5) Hard drive 2 TB, RAM 8 GB, DDR4, Display 60.5 an full HD (1920 x 1080), CPU: Intel, OS:- Windows 11 Home, UPS:- 1KVA, Printer: Laser Print.





Hot Plate With Magnetic Stirrer

KS/ME/HPWMS

•Top Plate Material: Ceramic or stainless steel
•Top Plate Dimensions: 7 x 7 inches or similar
•Temperature Range: Ambient to 500°C
•Temperature Accuracy: ±1°C
•Temperature Control: Digital display with PID control
•Heating Power: 500-1000 Watts
•Stirring Speed Range: 100 to 1500 RPM
•Stirring Capacity: Up to 5 liters
•Stirring Mechanism: Magnetic, with adjustable speed control
•Safety Features: Overheat protection, hot surface warning indicator
•Display: Digital LCD for temperature and speed
• Control Type: Separate controls for heating and stirring
•External Temperature Sensor: Included (PT100 or K-type thermocouple)
•Housing Material: Chemical-resistant, durable plastic or metal
•Power Supply: 220-240V, 50/60Hz





Bench top pH Meter

pH Range: 0 to 14 pH Accuracy: ±0.01 pH Temperature Range: 0 to 100°C Temperature Accuracy: ±0.5°C Display: Large LCD or LED Calibration: 2 or 3 point automatic calibration Temperature Compensation: Automatic or manual Electrode: Combination pH electrode with temperature sensor Connectivity: USB or RS232 for data transfer Power Supply: AC adapter





KS/MIS/HPH

Handheld pH Meter

•pH Range: 0 to 14

- •pH Accuracy: ± 0.01 pH
- •Temperature Range: 0 to $60^{\circ}C$
- •Temperature Accuracy: ±0.5°C
- •Display: Digital LCD
- •Calibration: 2 or 3 point automatic calibration
- •Temperature Compensation: Automatic
- •Electrode: Combination pH electrode with temperature sensor
- •Power Supply: Batteries (rechargeable preferred)





Sonicator Bath (2.5 liters)

KS/MIS/SB2.5L

- •Capacity: 2.5 liters
- •Ultrasonic Power: 100-150 Watts
- •Frequency: 35-45 kHz
- •Temperature Range: Ambient to 80°C
- •Timer: Up to 99 minutes
- •Display: Digital display for temperature and time
- •Material: Stainless steel tank
- •Drainage System: Built-in (preferred)
- •Power Supply: 220-240V, 50/60Hz





Vacuum Pump

KS/MIS/VP

Type: Rotary vane or diaphragm pump
Ultimate Vacuum: ≤ 10 mbar
Flow Rate: ≥ 20 L/min
Power: 220-240V, 50/60Hz
Material: Corrosion-resistant materials for wetted parts
Noise Level: ≤ 60 dB
Safety Features: Overload protection





Double Distillation Unit (2.5 LPH Output)

KS/MIS/DDU2.5LPH

- •Output Capacity: 2.5 liters per hour
- •Water softener : high quality water softener shall be supplied.
- •Material: All quartz for boiler and condenser
- •Power: 220-240V, 50/60Hz
- •Heating Element: Quartz immersion heater
- Safety Features: Overheat protection, low water cut-off
- •Water Quality: Conductivity \leq 1 µS/cm





Weighing Balance

KS/MIS/WB

Capacity: 0.1 mg to 220 g
Readability: 0.01 mg to 0.1 mg
Pan Size: ≥ 80 mm diameter
Display: Digital LCD with backlight
Calibration: Internal/automatic calibration
Stabilization Time: ≤ 3 seconds
Draft Shield: Included
Power Supply: AC adapter





Benchtop EC Meter

•Conductivity Range: 0.01 $\mu S/cm$ to 200 mS/cm

- •Conductivity Accuracy: $\pm 0.5\%$ full scale
- •Temperature Range: 0 to 100°C
- •Temperature Accuracy: $\pm 0.5^{\circ}C$
- •Display: Digital LCD
- •Calibration: Automatic or manual, multi-point
- •Temperature Compensation: Automatic
- •Electrode: Conductivity cell with temperature sensor
- •Connectivity: USB or RS232 for data transfer
- •Power Supply: AC adapter



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KS/MIS/BTECM

Joule's Calorimeter with Thermometer

- •Material: Copper inner vessel with insulating outer jacket
- •Dimensions: Inner vessel diameter of approximately 7-10 cm, height of 10-15 cm
- •Capacity: Approximately 200-300 ml
- •Stirring Mechanism: Manual stirrer included
- •Insulation: High-quality insulating material to minimize heat loss.
- •Lid: Well-fitted lid with openings for thermometer and stirrer.

I.Type: Digital alcohol glass thermometer II.Temperature Range: -10°C to 110°C III.Accuracy: ±0.1°C for digital, ±0.5°C for alcohol IV.Resolution: 0.1°C for digital thermometer V.Stem Length: 15-30 cm, suitable for insertion into the calorimeter VI.Scale: Clear, easy-to-read markings for glass thermometers VII.Safety: Shatter-resistant casing for glass thermometers

Ease of Use: Simple setup and operation, suitable for educational purposes Durability: Made from durable materials to withstand repeated use Calibration: Factory calibrated for accurate measurements Instructions: Detailed user manual included



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KS/PHY/JCWT

Handheld EC Meter

KS/MIS/HHECM

- •Conductivity Range: 0.01 µS/cm to 20 mS/cm
- •Conductivity Accuracy: $\pm 1\%$ full scale
- •Temperature Range: 0 to 50°C
- •Temperature Accuracy: $\pm 0.5^{\circ}C$
- •Display: Digital LCD
- •Calibration: Automatic, single-point or multi-point
- •Temperature Compensation: Automatic
- •Electrode: Conductivity cell with temperature sensor
- •Power Supply: Batteries (rechargeable preferred)





BOD (Biochemical Oxygen Demand) Incubator

•Capacity: 30 to 300 liters

- •Temperature Range: 5°C to 60°C
- •Temperature Accuracy: $\pm 0.1^{\circ}C$
- •Temperature Uniformity: ±0.5°C
- •Temperature Control: Digital PID controller
- •Display: Digital LED/LCD for temperature and timer
- Interior Material: Stainless steel
- •Exterior Material: Powder-coated mild steel or stainless steel
- Shelves: Adjustable and removable stainless steel shelves
- Cooling System: Hermetically sealed compressor with CFCfree refrigerant
- Air Circulation: Forced air circulation for uniform temperature distribution
- Insulation: High-density polyurethane foam
- •Door: Double door with inner glass door for viewing without temperature fluctuation
- •Alarm: Audio and visual alarm for temperature deviation
- •Timer: Programmable timer (0-999 hours)
- •Safety Features: Over-temperature protection, door open alarm
- •Power Supply: 220-240V, 50/60Hz



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KS/MIS/BOD

COD (Chemical Oxygen Demand) Digester

•Capacity: 15 to 25 vials, 20 ml each

- •Temperature Range: Ambient to 200°C
- •Temperature Accuracy: ±1°C
- •Temperature Control: Digital PID controller
- •Timer: Programmable, up to 999 minutes
- •Display: Digital LCD for temperature and time
- •Heating Block: Aluminum alloy or stainless steel, corrosion- resistant
- •Safety Features: Over-temperature protection, auto-shutoff
- •Construction: Double-walled, insulated exterior
- •Vial Holders: Chemical-resistant, compatible with standard COD vials
- •Power Supply: 220-240V, 50/60Hz



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KS/MIS/COD

Hot Air Oven

KS/MIS/HAO

•Capacity: 250 liters

•Temperature Range: Ambient to 250°C

•Temperature Accuracy: ±1°C

•Temperature Control: Digital PID controller

Construction: Double-walled, with inner chamber made of stainless steel

•Air Circulation: Forced air circulation for uniform temperature distribution •Safety Features: Overheat protection, timer

•Power Supply: 220-240V, 50/60Hz





Manometer

•Type: Digital or analog

- •Measurement Range: ± 1000 Pa to ± 10000 Pa
- •Accuracy: $\pm 0.5\%$ full scale
- •Display: Digital LCD for digital type
- •Connection Ports: Suitable for various tube sizes
- •Material: Corrosion-resistant materials for wetted parts
- •Power Supply: Batteries for digital type



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KS/MIS/MANO

Digital Thermometer

Digital thermometer with K type wire

Temperature Range: -50°C to 1300°C
Temperature Accuracy: ±0.5% ±2°C
Temperature Resolution: 0.1°C
Display: Digital LCD with backlight
Sensor Type: K type thermocouple wire
Probe Material: Stainless steel
Response Time: ≤ 2 seconds
Calibration: Factory calibrated, user calibration option
Power Supply: Batteries (9V or AA)
Battery Life: ≥ 100 hours continuous use
Housing Material: Durable plastic, shock-resistant
Data Hold Function: Yes
Min/Max Temperature Recording: Yes
Auto Power Off: Yes

•Optional Features:

a. Data Logging: USB or Bluetooth connectivity for data transfer
b. Waterproof: IP65 rated
c. Dual Channel: Capable of reading two K type thermocouples simultaneously
d. Carrying Case: Included for storage and portability

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KS/MIS/DT

Benchtop Autoclave (Small Size)

KS/MIS/BTAC

•capacity: 10 to 20 liters

•chamber material: stainless steel

•temperature range: ambient to 134°C

•pressure range: 0 to 2.5 bar

•sterilization cycles: pre-programmed and

customizable cycles

•control system: digital PID controller with LCD display

•timer: up to 99 minutes

safety features: over-pressure protection, overtemperature protection, automatic shut-off
door type: manual or semi-automatic with safety interlock

water source: integrated water tank or direct connection to distilled water supply
drying function: optional, with vacuum drying capability

•power supply: 220-240V, 50/60Hz

•dimensions: compact design suitable for benchtop use

accessories: trays, basket, and sterilization pouches included



