

# PROPACK ELECTRONICS PVT. LTD.



PRESENTATION ON PRODUCTS & SERVICES WE OFFER TO OUR  
VALUABLE CUSTOMERS.



# BENEFITS OF CHOOSING US

- The headquarter of Propack Electronics Pvt. Ltd. is in New Delhi ,with its Manufacturing Unit in Greater Noida, U.P and sales offices all over India.
- Well over 600000 Sq feet of ESD Flooring installed and certified.
- Flexibility in manufacturing with Custom products to suits customer's specific requirements.
- Prices that are realistic affordable and unmatched by our competitors.

- Single Source , seamless complete solution provider for Electronics ,Telecom ,Photovoltaic's and other allied industries.
- The Most Stringent quality control parameters in the industries , assuring superior design and reliability.

- Complete Turnkey solutions in days, not in months.
- Unmatched technical support and services before, during and after your purchase.
- We commit to our customers and our trade partners the value which guide our decisions and performance.

# ESD ELECTROSTATIC ALARAM

(ORDERING PART NO. : P0076)

The electrostatic alarm is a portable battery operated instrument, incorporating simple technology to indicate excessive charge accumulation in environments where ESD are detrimental to manufacturing process in the semiconductor and various ESD protected industries. The instrument can be kept in 'ON' for continuous monitoring of critical static safe area. Resetting the alarm is performed automatically.



## OPERATION:

A static charge has the capability to produce an electric field on any object, and the strength of the field at an inverse distance from the charge, the electrostatic alarm responds to this electric field, also more specifically it senses only charges in the electric field. So to detect a charge there should be a relative motion between the instrument and the charged body.

## SPECIFICATIONS:

Power Supply	: 9V Battery
Detection Voltage	: +/- >100V
Detection Method	: Charge coupling by field interception
Range Selection	: Auto ranging & Auto Resetting
Indication	: LED's visual indication with audible sound
Dimensions	: 105 x 70 x 25 mm
Weight	: 120 gms (with battery)
Warranty	: 12 Months.
Accessories	: Carry Case.

# ESD STATIC CHARGE METER

(ORDERING PART NO. : P0088A)

Static field meters are ideal instruments for measuring the magnitude and polarity of electrostatic potentials commonly encountered in development laboratories, electronic manufacturing areas, printing press, packing and production lines, etc.



SFM is a light weight non-contacting static field meter to measure static voltages with a polarity on objects & surfaces. The unit gives direct readings of electrostatic potentials on any surface, when held at a distance of 1 inch. However, virtually higher electrostatic potential can be measured by proportionately increasing the distance from the meter to the charged object. The instrument features large display with a very low drift circuit to give measurements.

## SPEFIFICATIONS:

Measurement Range	: +/- 10 kV @ 1 Inch, +/- 20 kV @ 2 Inch, +/- 30 kV @ 3 Inch.
Accuracy	: +/-10%
Indication	: 3 ½ Digit LCD Display
Resolution	: 10 Volts
Over Range	: On LCD symbol "▲" Indicates over range
Power supply	: 9 Volt Battery
Low Battery	: On LCD "BAT" indicates low battery
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Dimensions	: 135 x 70 x 25 mm
Weight	: 150 gms (with battery)
Warranty	: 12 Months
Accessories	: Carry case.

# ESD STATIC CHARGE METER

(ORDERING PART NO. : P0088B)

Static field meters are ideal instruments for measuring the magnitude and polarity of electrostatic potentials commonly encountered in development laboratories, electronic manufacturing areas, printing press, packing and production lines, etc.



SFM is a light weight non-contacting static field meter to measure static voltages with a polarity on objects & surfaces. The unit gives direct readings of electrostatic potentials on any surface, when held at a distance of 1 inch. However, virtually higher electrostatic potential can be measured by proportionately increasing the distance from the meter to the charged object. The instrument features large display with a very low drift circuit to give measurements.

Moreover the model has a special feature of "HOLD" function. The function of hold is to hold the exact or final reading measured by meter.

## SPEFIFICATIONS:

Measurement Range	: +/- 10 kV @ 1 Inch, +/- 20 kV @ 2 Inch, +/- 30 kV @ 3 Inch.
Accuracy	: +/-10%
Indication	: 3 ½ Digit LCD Display
Resolution	: 10 Volts
Over Range	: On LCD symbol "▲" Indicates over range
Power supply	: 9 Volt Battery
Low Battery	: On LCD "BAT" indicates low battery
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Dimensions	: 135 x 70 x 25 mm
Weight	: 150 gms (with battery)
Warranty	: 12 Months
Accessories	: Carry case.

# STATIC VOLTAGE TESTER

(ORDERING PART NO. : P0072A)

One of the most common causes of electrostatic damage is the direct transfer of electrostatic charge from the human body. When one walks across a floor, an electrostatic charge accumulates on the body. Simple contact of a finger allows the body to discharge, possibly causing device to damage.

The Model PST-01 is designed to measure the static Voltages carried on a personnel. It is a precision instrument to verify whether Personnel entering an ESD safe area are carrying any hazardous charges on themselves.

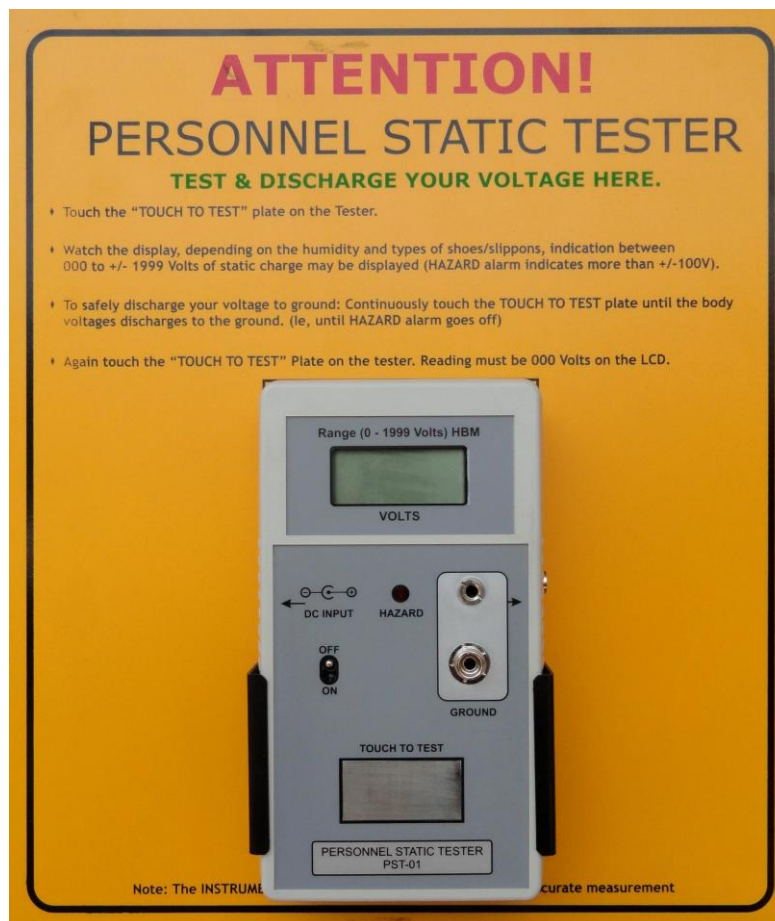
It is very simple to use and only requires the personnel under test to touch the plate on the instrument and directly read the charge level in volts on the meter. Apart from the measuring the voltages, it can also be used to safely drain away the charges from the personnel. **The instrument has a special feature of visual and audible "HAZARD" indication when it measures more than +/-100V.** It is very quick and convenient method to check personnel voltages.



Moreover the tester will audit any potential static generator or dissipater, like. Wrist straps, heel grounders, toe straps, static safe shoes, floor mats, etc....

**SPEFIFICATIONS:**

Range	: +/-1999V
Hazard Indication	: Visual and audible alarm if voltage exceeds +/-100V
Indications	: 3 ½ Digit LCD display with polarity indication
Resolution	: 1 Volt
Accuracy	: +/- 10%
Test actuation	: Touch To Test
Power supply	: 9V DC Adopter or 9V Battery
Low battery	: indicates at < 7 V on Display
Dimensions	: 180 X 100 X 45 MM
Weight	: 300 Gms (With battery)
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Warranty	: 12 Months
Accessories	: 9V DC Adopter, Instruction board, Grounding cord & Carry case.



# STATIC VOLTAGE TESTER

(ORDERING PART NO. : P0072B)

One of the most common causes of electrostatic damage is the direct transfer of electrostatic charge from the human body. When one walks across a floor, an electrostatic charge accumulates on the body. Simple contact of a finger allows the body to discharge, possibly causing device to damage.

The Model PST-02 is designed to measure the static Voltages carried on a personnel. It is a precision instrument to verify whether Personnel entering an ESD safe area are carrying any hazardous charges on themselves.

It is very simple to use and only requires the personnel under press and hold to test on the instrument and directly read the charge level in volts on the meter. Apart from the measuring the voltages, it can also be used to safely drain away the charges from the personnel. Moreover the tester has a special feature of open by release the **ELECTROMAGNETIC LOCK** on the door before entering the EPA. It is very quick and convenient method to check personnel voltages.



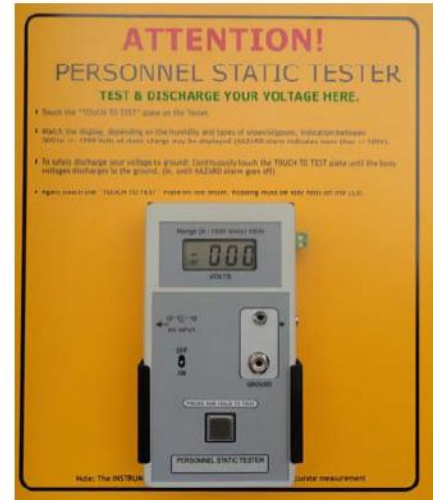
Electromagnetic Lock

Also, the tester will audit any potential static generator or dissipater, like. Wrist straps, heel grounders, toe straps, static safe shoes, floor mats, etc....



**PST-02 SPECIFICATIONS:**

Measurement range	: 0 to +/-1999V
Safe range (Entry)	: 0 to +/- 100V
Indications	: 3 ½ Digit LCD display
Resolution	: 1 Volt
Accuracy	: +/- 10%
Test actuation	: Press and hold to test
Power supply	: 9V DC Adopter or 9V Battery
Low battery	: indicates at < 7 V on Display
Dimensions	: 180 X 100 X 45 MM
Weight	: 325 Gms (With battery)
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Warranty	: 12 Months
Accessories	: 9V DC Adopter, Instruction board, Grounding cord & Pouch.



Instruction Board

**DOOR ACCESS CONTROL SPECIFICATIONS:**

Power supply	: 12V / 1A DC Adopter
Power consumption :	
Lock release time	: 3 to 15 second (Adjustable timer)
Operation	: Entry by the STATIC TESTER Exit by the SWITCH
Accessories	: 12V / 1A DC Adopter, Adjustable timer, Exit Switch and Connecting cords.
Warranty	: 12 Months



# SURFACE RESISTIVITY METER

In the electronic semiconductor industry, products such as packing materials, component storage trays and boxes, workstation surfaces, floor mats, conveyor belts, aprons, seating, etc., have resistance value, which need to confirm to stringent specifications, more over these resistance values are expected to fall within specified limits.

The SRM-9V instrument can play a vital role in monitoring and checking the Resistivity and Resistance to Ground characteristic of the above items.



This is an auto ranging precession, low cost, hand held battery operated instrument to measure  $10^3$  (Kilo ohms) to  $10^{13}$  (Tera ohms), and it is conveniently indicated by a row of different color LED's.

## SPECIFICATIONS:

Measurement Range	: $10^3$ to $10^{13}$ ohms & ohms/sq
Measurement Accuracy	: Half decade
Resolution	: One decade
Indication	: Visual by different color LED's
Power supply	: 9 Volt Battery
Test actuation	: Press & Hold to Test
Battery Status	: By dual color LED
Dimensions	: 135 x 70 x 25 mm
Weight	: 150 gms (With Battery)
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Warranty	: 12 Months
Accessories included	: Surface to Ground cord & Carry case.

**ORDERING PART NO. : P0079**

# SURFACE RESISTIVITY METER WITH PROBES

The model SRM-100V is a precision, low cost, hand held, battery operated instrument designed to measure Surface Resistivity, Surface to Ground and Resistance between two points in accordance with EOS/ESD Association standards S-11.11.

The SRM-100V meter (Including EXTERNAL ELECTRODES) is designed to make Surface to Ground and Resistance between two points measurements.



## SRM-100V SPECIFICATIONS:

Measurement Range :  $<10E3$  to  $>10E12$  Ohms (or) Ohms/Sq  
Measurement Accuracy : Half decade  
Resolution : One decade  
Probes test voltage : 100V (+/-5V)  
Indications : Different color LED's  
Test actuation : Press & Hold to TEST

Power supply	: 9V Battery
Low battery indication	: Flashes by "LOW-BAT" LED
Dimensions	: 135 x 70 x 25 mm
Weight	: 160 gms (with battery)
Calibration	: Recommended every 12 months
Calibration traceability	: To NATIONAL STANDARDS
Warranty	: 12 Months
Accessories	: External cords & Carry case
Optional	: 1 Set of 5 Pound External Electrodes.

**ORDERING PART NO. : P0080**

**OPTIONAL:**

**EXTERNAL ELECTRODES**

External testing electrodes are used for measuring POINT to POINT resistance and SURFACE to GROUND resistance of floors, work surfaces, floor mats, Paint & floor finishes. The probe accepts 4mm banana plug or 6mm ring terminal for taking the connections. It is designed accordance with EOS/ESD standards.

**SPECIFICATIONS:**

Weight	: 2.27 Kg (5 pound) per probe
Contact surface	: Conductive Pads
Contact Area	: 63.5 mm (2.5 Inches)
Conductive pads hardness	: < 70 (in durometer)
Resistance	: < 100 Ohms
Electrodes outer sleeve	: silicon rubber
Handle	: Insulative handle (Easy to catty)
Accessories	: PP corrugated box.

# DIGITAL SURFACE RESISTIVITY METER WITH PROBES

The model SRM-100D, Digital Surface Resistivity Meter is a portable, versatile, instrument design to accurately measure the resistance between two points, surface to ground and surface resistivity accordance with EOS/ESD Association standards S-11.11. In addition, the meter measures & displays ambient temperature & relative humidity.



The model SRM-100D, Digital Surface Resistivity Meter (includes EXTERNAL ELECTRODES) is designed to make measurements of Work surface, floors, foot wears, garments, workstations & operator chairs etc..

#### FEATURES:

Alpha numeric display Row 1: Ambient temperature and relative humidity are displayed during the meter ON condition.

Alpha numeric display Row 2: Provides easy to read measurements directly from the meter include exponents. No interpretations or calculations are required.

Surface Resistivity: Parallel stainless steel electrodes provide for measurement of surface resistivity or when quick testing without the use of External Electrodes is desired.

#### SPECIFICATIONS:

Temperature	: Range from 0 – 99.8°C
Resolution	: 0.2°C
Accuracy	: +/-1°C
Relative humidity	: Range from 30% to 90%
Resolution	: 1%
Accuracy	: +/-5%
SR-Measurement Range	: 1.00 x 10 <sup>3</sup> to 5.00 x 10 <sup>12</sup> ohms or ohms/sq
Resolution	: 0.20 x 10 <sup>x</sup> ohms or ohms/sq
Accuracy	: +/- 5 display counts
Test actuation	: Press & Hold to Test
Probes test voltage	: 100V (+/-5%)
Input power	: 2 x 9V Batteries.
Electrification period	: < 2 Seconds
Low battery indication	: Indicates by an LED
Dimensions in mm	: 180 X 100 X 45 MM
Weight	: 450 Gms (with batteries)
Calibration	: Recommended once In 12 months
Calibration traceability	: to NATIONAL STANDARDS
Warranty	: 12 months.
External Electrodes	: Two 5 Pound electrodes with Conductive pads
Accessories	: External Cords & Pouch
Optional	: 1 set of 5 pound External Electrodes.

**ORDERING PART NO. : P0081**

# WRIST STRAP MONITOR

In the electronics semiconductor industry operators wear personnel groundings devices of ESD wrist straps. It is most important for protections, and it is not possible to test the operator's wrist straps frequently in a day. As it will compromise the protection at any time the ESD damage can occur.

This Tester is an economy instrument to continuously monitor, ground the wrist strap and simultaneously monitor for faults in the ground path from the strap to the earth ground, and instantly give the indications by a visual & audible alarm to the operator. It does what which wrist strap tester, wrist strap & foot wear tester, common point ground & earth bonding plug cannot do (i.e., continuous monitoring).



The monitor automatically activated when wrist strap is plugged in. It continuously monitor, ground the wrist strap and simultaneously monitor for faults in the ground path from the strap to the earth ground, including broken coils cords and improper contact with the skin are detected instantly to alert the operator. As there is no resistance return path from the wrist strap, it uses the "capacitive AC pulse principle" to check if the operators are adequately grounded.

## SPECIFICATIONS:

- |                            |  |
|----------------------------|--|
| 1. Wrist strap indications | : Pass – Green LED<br>Fail – Flashing Red LED with audible alarm |
| 2. Input power             | : DC 9V @ 300mA  |
| 3. Dimensions              | : 105 x 75 x 30mm  |
| 4. Weight                  | : 110 gms  |
| 5. Warranty                | : One year   |
| 6. Accessories             | : Grounding Cord   |
| 7. Optional                | : 9V DC Adopter  |

**ORDERING PART NO. : P0077A**

# WORK STATION MONITOR

In the electronics semiconductor industry ESD protected tables are used, which mainly consist of ESD mats or ESD laminates, and operators wear personnel groundings devices of ESD wrist straps. Both the items are most important for protection, and it is not possible to test the operators frequently in a day. As it will compromise the protection at any time the ESD damage can occur.

This mode is a precision instrument to continuously monitor and give the indications by a visual & audible alarm to the operator of the ESD work surface grounding connections and operator's wrist straps connections simultaneously. It does what which wrist strap & foot wear tester, surface resistivity meter, Common Point Ground & earth bonding plug cannot do (i.e., continuous monitoring).



**WRIST STRAP:** This section continuously monitors the wrist strap to detect loss of continuity between operator and monitor. Conditions such as broken coils cords and improper contact with the skin are detected instantly to alert the operator. As there is no resistance return path from the wrist strap, it uses the “capacitive AC pulse principle” to check if the operator is adequately grounded.

**WORK SURFACE / GND:** This section continuously monitors the work surface button to button resistance value, instrument to ground and work surface to ground connections simultaneously. This is monitored by a DC Resistive principle and a MAT/GND FAIL warning is given to the operator.



**SPECIFICATIONS:**

- |                            |   |
|----------------------------|---|
| 1. Wrist strap indications | : Pass – Green LED<br>Fail – Flashing Red LED             |
| 2. Mat/Gnd indications     | : Fail - Steady Red LED<br>(Audible alarm For Fail modes) |
| 3. Range                   | : 10 Meg ohms   |
| 4. Accuracy                | : +/-10%  |
| 5. Input power             | : DC 12V @ 300mA  |
| 6. Construction            | : MS powder coated box with mounting brackets             |
| 7. Calibration             | : Recommended every 12 months                             |
| 8. Traceability            | : To National Standards                                   |
| 9. Dimensions              | : 100 (L) x 60 (W) x 30 (H) mm                            |
| 10. Weight                 | : 200 grams   |
| 11. Warranty               | : One year  |
| 12. Accessories            | : Fixing clamp  |
| 13. Optional               | : 12V DC Adopter & Grounding Cords.                       |

**ORDERING PART NO. : P0077B**

# WORK STATION MONITOR & CONTROLLER

In the electronics semiconductor industry ESD SAFE tables are used, which mainly consist of ESD mats or ESD laminates, and operators wear personnel groundings devices like ESD wrist straps. Both the items are most important for protection, and it is not possible to test the operators frequently in a day. As it will compromise the protection at any time the ESD damage can occur.

This tester is a precision instrument to continuously monitor and give the indications by a visual & audible alarm to the operator of the ESD work surface grounding connections and operator's wrist straps connections simultaneously.

The Main feature is, it will give the independent potential free contacts(PF), to drive the external applications such as **table tower light indications**, controlling of any **electronic or electrical appliances mains power** (Like table tube light, soldering station or table power itself etc.,).



**WRIST STRAP:** This section continuously monitors the wrist strap to detect loss of continuity between operator and monitor. Conditions such as broken coils cords and improper contact with the skin are detected instantly to alert the operator. As there is no resistance return path from the wrist strap, it uses the "capacitive AC pulse principle" to check if the operator is adequately grounded.

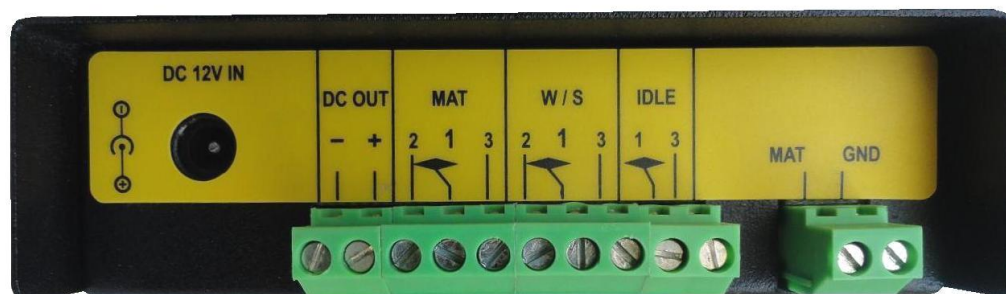
**WORK SURFACE / GND:** This section continuously monitors:-

- The work surface button to button resistance value,
- Monitor to ground connection
- Work surface to ground connections simultaneously.

This is monitored by a DC Resistive principle and a MAT/GND FAIL warning is given to the operator.

**SPECIFICATIONS:**

- |                             |   |
|-----------------------------|---|
| 1. Idle Indication          | : Amber LED indicates monitor in “ <b>IDLE</b> ”  |
| 2. Wrist strap indications  | : Green colour indicates “ <b>PASS</b> ”<br>(Dual colour LED)      Red colour indicates “ <b>FAIL</b> ” |
| 3. Mat/Gnd indications      | : Red LED indicates “ <b>FAIL</b> ”   |
| 4. Audible alarm            | : For all <b>FAIL’S</b> modes   |
| 5. Measurement range        | : 10 Meg ohms (+/-10%)  |
| 6. Input power              | : DC 12V @ 1000mA   |
| 7. Construction             | : MS powder coated box with mounting brackets   |
| 8. Calibration Traceability | : To National Standards   |
| 9. Dimensions               | : 120 x 110 x 35 mm   |
| 10. Weight                  | : 450 gms   |
| 11. Warranty                | : One year  |
| 12. Accessories             | : Fixing clamp  |
| 13. Optional                | : 12V DC Adopter, 12V/5A External Relay & Monitor Grounding<br>Cords.                                   |

**ORDERING PART NO. : P0077C****MONITOR BACK VIEW:**

The customer can use the POTENTIAL FREE Contacts to drive the external appliances by using the provided wrist strap monitor connector (**W/S**), mat monitor connector (**MAT**) or both connectors to control the external appliances.

# WORK STATION MONITOR

This Tester is a precision instrument to continuously monitor and give the indications by a visual & audible alarm to the operator of the ESD work surface grounding connections and operator's two wrist straps connections simultaneously & individually. It does what which wrist strap & foot wear tester, surface resistivity meter, Common Point Ground & earth bonding plug cannot do (i.e., continuous monitoring).



**WRIST STRAP:** This section continuously monitors the wrist straps to detect loss of continuity between operators and monitor simultaneously & individually. Conditions such as broken coils cords and improper contact with the skin are detected instantly to alert the operators. As there is no resistance return path from the wrist straps, it uses the “capacitive AC pulse principle” to check if the operators are adequately grounded.

**WORK SURFACE / GND:** This section continuously monitors the work surface button to button resistance value, instrument to ground and work surface to ground connections simultaneously. This is monitored by a DC Resistive principle and a MAT/GND FAIL warning is given to the operator.

## SPECIFICATIONS:

- |                            |  |
|----------------------------|--|
| 1. Wrist strap indications | : Pass – Green LED<br>Fail – Flashing Red LED          |
| 2. Mat/Gnd indications     | : Fail - Steady Red LED (Audible alarm For Fail modes) |
| 3. Range                   | : 10 Meg ohms  |
| 4. Accuracy                | : +/-10%   |
| 5. Input power             | : DC 12V @ 300mA                                       |
| 6. Calibration             | : Recommended every 12 months                          |
| 7. Traceability            | : To National Standards                                |
| 8. Dimensions              | : 140 x 110 x 35 mm                                    |
| 9. Weight                  | : 200 gms  |
| 10. Warranty               | : One year   |
| 11. Accessories            | : Fixing clamp   |
| 12. Optional               | : 12V DC Adopter & Grounding Cords.                    |

**ORDERING PART NO. : P0077D**

# WORK STATION MONITOR & CONTROLLER

This Tester is a precision instrument to continuously monitor and give the indications by a visual & audible alarm to the operator of the ESD work surface grounding connections and both the operator's wrist straps connections simultaneously & individually. It does what which wrist strap & foot wear tester, surface resistivity meter, Common Point Ground & earth bonding plug cannot do (i.e., continuous monitoring).

The main features is, it gives the independent potential free contacts to drive the external applications such as Table Tower light indications, switching of any electronic or electrical appliances mains power (Like table tube light, soldering station or table power itself etc.,).



## WRIST STRAP:

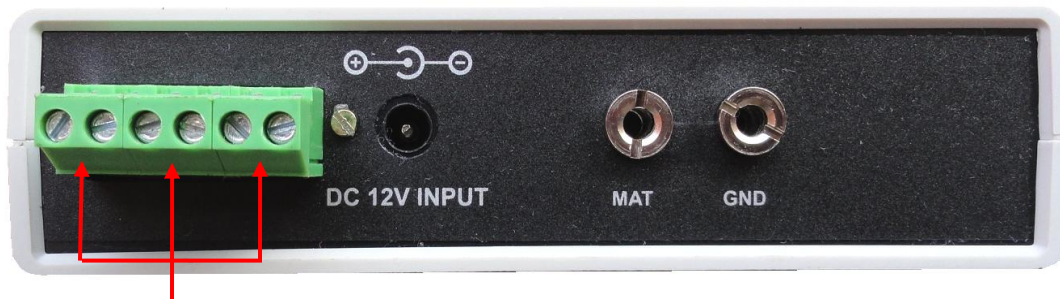
This section continuously monitors the wrist straps to detect loss of continuity between operators and monitor simultaneously & individually. Conditions such as broken coils cords and improper contact with the skin are detected instantly to alert the operators. As there is no resistance return path from the wrist straps, it uses the "capacitive AC pulse principle" to check if the operators are adequately grounded.

## WORK SURFACE / GND:

This section continuously monitors the work surface button to button resistance value, instrument to ground and work surface to ground connections simultaneously. This is monitored by a DC Resistive principle and a MAT/GND FAIL warning is given to the operator.

**SPECIFICATIONS:**

1. Wrist strap indications	: Pass – Green LED & Fail – Flashing Red LED
2. Mat/Gnd indications	: Fail - Steady Red LED (Audible alarm For Fail modes)
3. Range	: 10 Meg ohms
4. Accuracy	: +/-10%
5. Input power	: DC 12V @ 1000mA
6. Calibration	: Recommended every 12 months
7. Traceability	: To National Standards
8. Dimensions	: 140 x 110 x 35 mm
9. Weight	: 200 gms
10. Warranty	: One year
11. Accessories	: Fixing clamp
12. Optional	: 12V DC Adaptor, 12V/5A External Relay & Monitor Grounding Cords.

**ORDERING PART NO. : P0077E****MONITOR BACK VIEW:****MAT & WRIST STRAPS POTENTIAL FREE (PF) CONTACT OUTPUTS**

The customer can use the POTENTIAL FREE Contacts to drive the external appliances by using the provided wrist strap monitor connectors, mat monitor connector or all connectors to control the external appliances.

# WRIST STRAP & FOOTWEAR COMBO TESTER

The potential for damage caused by a static charge build-up on personnel involved in the handling of semiconductor devices. ESD wrist strap, heel strap, toe-strap and foot wears are most commonly used protective devices which prevent the build-up of electrostatic charge on personnel. The random failure of wrist strap or foot wears compromises the protection. Thus, it is important to test every wrist strap / footwear regularly.

This Tester is a friendly user, precision engineered combination tester, and it measures the electrical resistance of LEFT FOOT, RIGHT FOOT and WRIST STRAP individually under actual operating conditions. The tester reduces the testing time by half, and offers the operator a visual and audible measurement of PASS or FAIL of personnel groundings before entering the EPA.



The tester has special circuits for drift less readings (i.e., it displays only one result accurately). Moreover the tester works with 9V DC adopter or 9V Battery. So, no need of charging or replacing the battery frequently. It is very quick and convenient method to check personnel groundings.

**SPEFIFICATIONS:**

Range	: Wrist strap 0.75 to 10 Meg ohms Left footwear 0.75 to 100 Meg ohms Right footwear 0.75 to 100 Meg ohms
Indications	: Pass - GREEN LED Low & High fail - RED LED with Buzzer sound
Test actuation	: By press & hold the respective metal sensor plates
Accuracy	: +/- 10%
Power supply	: 9V DC Adopter or 9V Battery
Power supply status	: By Dual Color LED.
Dimensions	: 180 X 100 X 45 mm (Instrument size) 485 x 380 mm (Foot plate size) 980 mm (Height)
Weight	: 5.75 Kg (with foot plate)
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Warranty	: 12 Months only for Instrument
Accessories	: 9V DC Adopter.

OPTIONAL: Customized resistance limits can be provided to meet special user requirements.

**ORDERING PART NO. : P0075**



## WRIST STRAP & FOOTWEAR COMBO TESTER WITH DOOR LOCKING

The potential for damage caused by a static charge build-up on personnel involved in the handling of semiconductor devices. ESD wrist strap, heel strap, toe-strap and foot wears are most commonly used protective devices which prevent the build-up of electrostatic charge on personnel. The random failure of wrist strap or foot wears compromises the protection. Thus, it is important to test every wrist strap / footwear regularly.

This meter is a friendly user, precision engineered combination tester, and it measures the electrical resistance of LEFT FOOT, RIGHT FOOT and WRIST STRAP individually under actual operating conditions. The tester reduces the testing time by half, and offers the operator a visual and audible measurement of PASS or FAIL of personnel groundings.

Moreover the tester has a special feature of open by release the **ELECTROMAGNETIC LOCK** on the door before entering the EPA.

The tester has special circuits for drift less readings (i.e., it displays only one result accurately). Tester works with 9V DC adopter or 9V Battery. So, no need of charging or replacing the battery frequently. It is very quick and convenient method to check personnel groundings.

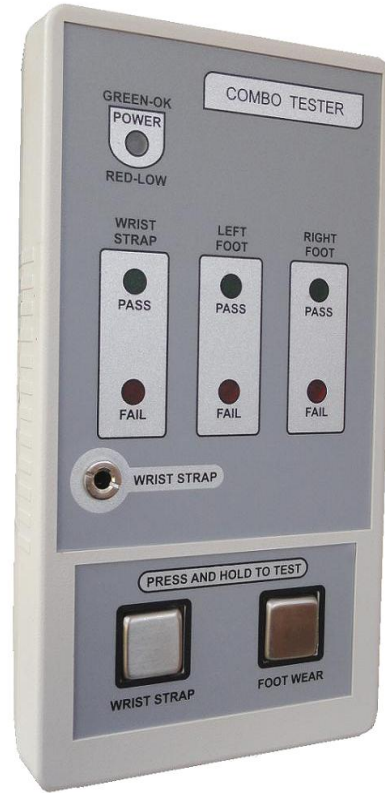
### SPECIFICATIONS:

Range	: Wrist strap 0.75 to 10 Meg ohms Left footwear 0.75 to 100 Meg ohms & Right footwear 0.75 to 100 Meg ohms
Indications	: Pass - GREEN LED , Low & High fail - RED LED with Buzzer sound
Test actuation	: By press & hold the respective metal sensor plates
Accuracy	: +/- 10%
Power supply	: 9V DC Adopter or 9V Battery for instrument
Power supply status	: By Dual Color LED.
Dimensions	: 180 X 100 X 45 MM (Instrument size) 485 x 380 mm (Foot plate size) 980 mm (Height)
Weight	: 5.75 Kg (with foot plate)
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Warranty	: 12 Months only for Instrument
Accessories	: 9V DC Adopter

### DOOR ACCESS CONTROL SPECIFICATIONS:

Power supply	: 12V / 1A DC Adopter
Lock release time	: 3 to 15 second (Adjustable timer)
Operation	: Entry by the COMBO TESTER & Exit by the SWITCH
Accessories	: 12V / 1A DC Adopter, Adjustable timer, Exit Switch and Connecting cords.
Warranty	: 12 Months

### ORDERING PART NO. : P0089



## WRIST STRAP & FOOTWEAR COMBO TESTER WITH CONTROL ENTRY

The potential for damage caused by a static charge build-up on personnel involved in the handling of semiconductor devices. ESD wrist strap, heel strap, toe-strap and foot wears are most commonly used protective devices which prevent the build-up of electrostatic charge on personnel. The random failure of wrist strap or foot wears compromises the protection. Thus, it is important to test every wrist strap / footwear regularly.

This Tester Controlled Entry Systems is designed to control of personnel into ESD safe area by measuring foot wears or wrist strap resistance. If the measured resistance is within limits and access is approved, the turnstile unlocks permitting passage. Also the tester offers the operator a visual and audible measurement of PASS or FAIL of the personnel groundings. It is good security system for entry of personnel into the restricted ESD safe area.



**SPECIFICATIONS :**

Range	: Wrist strap 0.75 to 10 Meg ohms Left footwear 0.75 to 100 Meg ohms Right footwear 0.75 to 100 Meg ohms
Accuracy	: +/- 10%
Indications	: Pass - GREEN LED Low & High fail - RED LED with Buzzer sound Test actuation: By press & hold the respective metal sensor plates
Power supply	: 9V DC Power supply
Calibration	: Recommended every 12 months
Traceability	: Traceable To National Standards

**TURNSTILE SPECIFICATIONS : Can be customer specific Turnstile as well.**

Overall Dimensions	: L-420 x B-630 x H-1020 mm
Weight	: 40 Kg approx.
Material Finish	: Stainless Steel or Mild Steel powder coated
Input Power	: 230V AC, 50Hz
Power Consumption	: 30 Watt max.
Tripod Release Time	: 3 seconds
Lane indicator	: It indicates lane direction & tripod status Green arrow mark – GO Red Cross mark – STOP
Operation	: Entry by the COMBO TESTER Exit by the SWITCH
Warranty	: 12 Months

**ORDERING PART NO. : P0090**

# WRIST STRAP & FOOTWEAR TESTER

The potential for damage caused by a static charge build-up on personnel involved in the handling of semiconductor devices. ESD wrist strap, heel strap, toe-strap and foot wears are most commonly used protective devices which prevent the build-up of electrostatic charge on personnel. The random failure of wrist strap or foot wears compromises the protection. Thus, it is important to test every wrist strap / footwear regularly.



Wrist strap & footwear tester is a economy instrument that check the specified limit of all types of wrist straps, foot wears and other similar personnel grounding devices under actual operating conditions with the strap on the wrist or foot wear on the foot. It clearly indicates whether PASS or FAIL. The maximum wrist strap resistance should not be more than 10 Meg ohms and foot wears resistance should not be more than 100 Meg ohms. On the other end, the resistance should not be less than 0.75 Meg ohms as protection to the wearer from dangerous level of the voltage and current flow.

**ATTENTION!**

**WRIST STRAP & FOOT WEAR TESTER**

**TEST YOUR PERSONNEL GROUNDINGS HERE.**

- ♦ **WRIST STRAP TEST:** Select the switch to wrist strap range  
 Insert wrist strap jack into tester with strap on the wrist.  
 Press and Hold the metal sensor plate.  
 GREEN LED indicates safe resistance PASS  
 RED LED Indicates FAIL
- ♦ **FOOT WEAR TEST:** Select the switch to foot wear range.  
 Insert foot plate jack into tester.  
 Step on the foot plate with foot wear.  
 Press and Hold the metal sensor plate.  
 GREEN LED indicates safe resistance PASS  
 RED LED Indicates FAIL



GREEN - PASS





RED - FAIL



**SPEFIFICATIONS**

Range	: Wrist strap 0.75 to 10 Meg ohms Foot Wear 0.75 to 100 Meg ohms
Range Selection	: By Toggle Switch
Indications	: Pass - GREEN LED LOW & High fail - RED LED (With Alarm)
Test actuation	: By Press & Hold the Metal sensor plate.
Accuracy	: +/- 10%
Power supply	: 9 Volt Battery
Low Battery	: Warning less than 7 volts.
Dimensions	: 135 x 70 x 25 mm
Weight	: 150 gms (with battery)
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Warranty	: 12 Months
Accessories	: Carry Case.
Optional	: Foot Plate & User instruction board.

**ORDERING PART NO. : P0074A**

# WRIST STRAP & FOOTWEAR TESTER

The potential for damage caused by a static charge build-up on personnel involved in the handling of semiconductor devices. ESD wrist strap, heel strap, toe-strap and foot wears are most commonly used protective devices which prevent the build-up of electrostatic charge on personnel. The random failure of wrist strap or foot wears compromises the protection. Thus, it is important to test every wrist strap / footwear regularly.



**ATTENTION!**

**WRIST STRAP & FOOT WEAR TESTER**

**TEST YOUR PERSONNEL GROUNDINGS HERE.**

• **WRIST STRAP TEST:** Select the switch to wrist strap range. Insert wrist strap jack into tester with strap on the wrist. Press and Hold the metal sensor plate. GREEN LED indicates safe resistance PASS. RED LED Indicates FAIL.

• **FOOT WEAR TEST:** Select the switch to foot wear range. Insert foot plate jack into tester. Step on the foot plate with foot wear. Press and Hold the metal sensor plate. GREEN LED Indicates safe resistance PASS. RED LED Indicates FAIL.



GREEN - PASS





RED - FAIL



The Wrist Strap & Footwear tester is a precession instrument that check the specified limit of all types of wrist straps, foot wears and other similar personnel grounding devices under actual operating conditions with the strap on the wrist or foot wear on the foot. It clearly indicates whether LOW-FAIL or PASS or HIGH-FAIL the maximum wrist strap resistance should not be more than 10 Meg ohms and foot wears resistance should not be more than 100 Meg ohms. On the other end, the resistance should not be less than 0.75 Meg ohms as protection to the wearer from dangerous level of the voltage and current flow.

The instrument circuits is specially designed for the drift less readings (i.e., it displays only one result accurately) and it is very quick and convenient method to check personnel groundings.

**OPTIONAL:** Customized resistance limits can be provided to meet special user requirements.

### **SPEFIFICATIONS:**

Range	: Wrist strap 0.75 to 10 Meg ohms Foot Wear 0.75 to 100 Meg ohms
Range Selection	: By Toggle Switch
Indications	: LOW-FAIL (Indicates Less than 0.75 Meg Ohms) PASS (Indicates 0.75 to 10/100 Meg ohms) HIGH-FAIL (indicates More than 10/100 Meg Ohms) (Audible alarm for FAIL modes)
Test actuation	: By Press & Hold the Metal sensor plate.
Accuracy	: +/- 10%
Power supply	: 9 Volt Battery
Battery Status	: By dual color LED (Red-Low Bat & Green-Ok).
Dimensions	: 135 x 70 x 25 mm
Weight	: 150 gms (with battery)
Calibration	: Recommended every 12 months
Traceability	: To National Standards
Warranty	: 12 Months
Accessories	: Carry Case.
Optional	: Foot Plate, User Instruction Board.

### **ORDERING PART NO. : P0074B**

The Optional USER INSTRUCTION BOARD can be wall mounted outside the ESD protected area and Foot wears can be tested by connecting the stainless steel FOOT PLATE.



# WRIST STRAP TESTER

The potential for damage caused by a static charge build-up on personnel involved in the handling of semiconductor devices. ESD wrist strap is most commonly used protective devices which prevent the build-up of electrostatic charge on personnel. The random failure of wrist strap compromises the protection. Thus, it is important to test every wrist strap regularly.



The wrist strap tester is a economy instrument that check the specified limit of all types of wrist straps under actual operating conditions with the strap on the wrist. It clearly indicates whether PASS or FAIL. The maximum wrist strap resistance should not be more than 10 Meg ohms. On the other end, the wrist strap resistance should not be less than 0.75 Meg ohms as protection to the wearer from dangerous level of the voltage and current flow.



**SPEFIFICATIONS:**

Range : Wrist strap 0.75 to 10 Meg ohms  
PASS Indication : Resistance Between 0.75 to 10 Meg Ohms  
FAIL Indication : Resistance below 0.75 or above 10 Meg Ohms  
Audible Alarm : Sounds for FAIL Indications.  
Test actuation : By Press & Hold the Metal sensor plate.  
Accuracy : +/- 10%  
Power supply : 9 Volt Battery  
Low Battery : Warning less than 7 volts.  
Dimensions : 135 x 70 x 25 mm  
Weight : 150Gms with battery  
Calibration : Recommended every 12 months  
Traceability : To National Standards  
Warranty : 12 Months  
Accessories : Carry Case.

**ORDERING PART NO. : P0073A****OPREDING PART NO. ( WITH INSTRUCTION BOARD ) : P0073B**

# BENCH TOP IONIZER

(ORDERING PART NO. : P0083)

Bench top ionizer are useful in neutralizing generated electrostatic charges, which may cause Electrostatic Discharge, Electrostatic Attraction, as well as preventing equipment latch-up and safety related shock. This is a portable unit designed to neutralize static charges from insulator surfaces in assembly areas, wave soldering lines, laboratories, storage racks, test stations and packing areas.



The Ionizer works on the principle of high voltage corona discharge to produce the neutralizing ions, and it produces ions airflow that is rich in positive and negative ions directing the airflow on an object that has static electricity in order to neutralize the charges. It will be neutralized by attracting opposite polarity charges from the ionized air. It does what grounding cords, table mats & antistatic laminates cannot do (i.e., remove the static charges from insulator objects and surfaces). More over the bench top ionizer is designed with compact high voltage pulse circuitry for continuous trouble free operation.

## SPECIFICATIONS:

Power supply	: 230V AC 50Hz
Power consumption	: 25 watts
Speed	: 2550 RPM
Air flow	: 2.24 m <sup>3</sup> /min
Noise	: 45 dBA
Static pressure	: 6.4 mm H <sub>2</sub> O
Ionization voltage	: 6 - 8 KV
Ion balance	: under +/- 100 V
Construction	: Powder coated MS cabinet
Dimensions in mm	: 225 x 190 x 110 (with stand & knob bolt)
Weight	: 2.7 kgs
Warranty	: One year

# OVERHEAD IONIZER

(ORDERING PART NO. : P0084A)

Overhead Ionizer are useful in neutralizing generated electrostatic charges, which may cause Electrostatic Discharge, Electrostatic Attraction, as well as preventing equipment latch-up and safety related shock. This overhead unit designed to neutralize static charges from insulator surfaces in assembly areas, wave soldering lines, laboratories, storage racks, test stations and packing areas. The unit can be conveniently hung over the work place and the two fans covers larger area to neutralize the charges.



The overhead ionizer works on the principle of high voltage corona discharge to produce the neutralizing ions, and it produces ions airflow that is rich in positive and negative ions directing the airflow on an object that has static electricity in order to neutralize the charges. It will be neutralized by attracting opposite polarity charges from the ionized air. More over the overhead ionizer is designed with compact high voltage pulse circuitry for continuous trouble free operation.

## SPECIFICATIONS:

Power supply	: 230V AC 50Hz
Power consumption	: 50 watts
Speed	: 2550 RPM
Air flow	: 2.24 m <sup>3</sup> /min
Noise	: 50 dBA
Static pressure	: 6.4 mm H <sub>2</sub> O
Ionization voltage	: 6 - 8 KV
Ion balance	: under +/- 100 V
Construction	: Powder coated MS cabinet
Dimensions in mm	: 610 x 165 x 85 mm
Weight	: 4.8 Kg (appx.)
Warranty	: One year

# OVERHEAD IONIZER

(ORDERING PART NO. : P0084B)

Overhead Ionizer are useful in neutralizing generated electrostatic charges, which may cause Electrostatic Discharge, Electrostatic Attraction, as well as preventing equipment latch-up and safety related shock. This overhead unit designed to neutralize static charges from insulator surfaces in assembly areas, wave soldering lines, laboratories, storage racks, test stations and packing areas. The unit can be conveniently hung over the work place and the four fans covers larger area to neutralize the charges.



The overhead ionizer works on the principle of high voltage corona discharge to produce the neutralizing ions, and it produces ions airflow that is rich in positive and negative ions directing the airflow on an object that has static electricity in order to neutralize the charges. It will be neutralized by attracting opposite polarity charges from the ionized air. More over the overhead ionizer is designed with compact high voltage pulse circuitry for continuous trouble free operation.

## SPECIFICATIONS:

Power supply	: 230V AC 50Hz
Power consumption	: 100 watts
Speed	: 2550 RPM
Air flow	: 2.24 m <sup>3</sup> /min
Noise	: 55 dBA
Static pressure	: 6.4 mm H <sub>2</sub> O
Ionization voltage	: 6 - 8 KV
Ion balance	: under +/- 100 V
Construction	: Powder coated MS cabinet
Dimensions in mm	: 1095 x 165 x 85 mm
Weight	: 7.5 Kg (appx.)
Warranty	: One year

# HAND AIR IONIZER (ORDERING PART NO. : P0086)

The HAND AIR IONIZER is a light weight, hand-held compressed air gun utilizing a static eliminating nozzle. The gun is primarily designed for simultaneously cleaning & neutralizing small or sensitive parts and materials. Neutralizing makes it easier to blow parts clean and prevents re-attraction of dust and dirt particles. The gun is used in conjunction with a power unit which supplies the high voltage necessary for operation of the gun.



## SPECIFICATIONS: -

Input Voltage	AC 230V / 50Hz.
Input Current	120 mA
Discharge (corona) voltage	4 KV
Effective distance	100-300 mm
Standard HV Cable Length	3 Meter
Air Pressure	2.0 – 7.0 kg/cm <sup>2</sup>
Relative Humidity	Not more than 80% RH

For proper operation of the gun, and to prevent shock to operating personnel, it is important that the gun and power unit be properly grounded.

## SPOT IONIZER (ORDERING PART NO. : P0085A)

It is a hand free , flexible nozzle for free movement which can be positioned to produce a clean ionized stream to target surface. Air Nozzle has an effective area of 1000mm.



### Specifications :

Operating Voltage	4.6 KV
Current Consumption	350 $\mu$ A
Air Pressure	40–100 psi
Air Velocity	10m/sec

## IONIZER AIR BAR (ORDERING PART NO. : P0085B)

Mostly used in automobile and at the entrance of the gate. It need to be connected with a air compressor for continuous air . It is a very effective method to remove dust and avoid the static charge generation on the material.

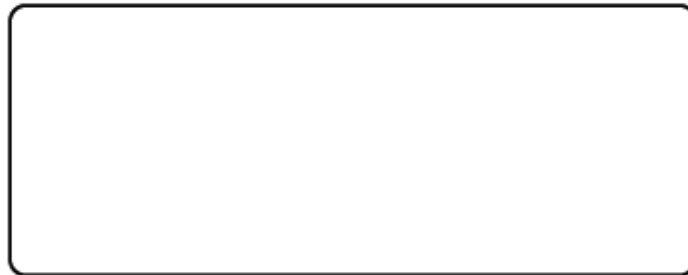


### Specifications :

HV Cable Length	3 m
Max & Min Length	2000mm / 200mm
Current Consumption	0.52mA

FOR ANY FURTHER QUERIES PLEASE CONTACT ....

Authorised Distributor:



**PROPACK**

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