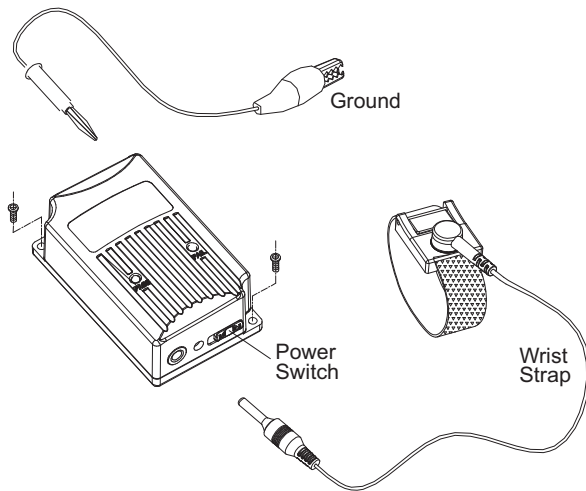


**Inde P/N : ISM-495**

**Continuous Wrist Strap Monitor**

Inde ISM-495 monitors ESD integrity of operator and ground. Provides instant notification of the wrist strap or ground failure. When the production process is of very high value, reliable ESD safety and ground is must for continuous monitoring at operator level.

- Continuously monitors the wrist strap integrity
- Continuously monitors the grounding integrity
- Sound and light alarm
- Portable and compact, easy to use
- Output Voltage : 8 – 12 VDC
- Mounting holes to mount on the table
- Weight : 50g approx
- Dim: 75(L) x 46(W) x 27(H) mm



**Operation:**

Connect grounding lead and switch on power. Put on wrist strap and put the banana-plug into Wrist Strap Monitor. Turn ON switch. 'CAL' if needed. The Tester is now continuously monitoring the wrist strap and ground. In case of any problem with wrist strap or ground, alarm is sounded and light turns red.

LED	Value
OK (Green)	825KΩ ~ 9MΩ
Fail (Red)	11MΩ and above
Fail (Red)	765KΩ and below

**Warmbier Model : SRM 110**

**Warmbier Germany, Surface Resistance Meter**

(Part No.: 7100.SRM110.A)

Pocket size, lightweight, auto ranging surface resistance meter for verification of conductive and dissipative materials. Internal parallel metal electrode. External probes can be connected.



**Specifications**

- LED: 10 lights
- Low Battery: LED flashing
- Battery: 9 volts
- Range:  $10^3 - 10^{12} \Omega$
- Accuracy Range: +/- 10%
- Size: 130 x 65 x 31mm
- Weight: 240g



Sockets for external probes

**Supplied with:**

- Instrument SRM 110
- Carrying bag
- 9V-battery (installed)
- Grounding cord
- User's manual
- Calibration certificate

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# User's Manual



## Surface Resistance Meter **SRM 110**

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## Introduction

The SRM110 is a pocket size, lightweight, auto ranging surface resistance tester. Its internal parallel electrodes comply with **DIN EN 100 015/1**. IEC electrodes can be externally connected for tests according to **IEC 61340-4-1**. The measuring voltage is auto-ranging 10V to 100V.

## Operation Instruction

### *Measuring Surface Resistance*

- To measure the surface resistance of an object, hold the instrument to the surface and press the "TEST" button.
- The value is indicated with 12 LED's, in different colours.

The LED's indicate:

LED	Range	Definition
Green	$< - 10^5 \Omega$	Electrostatic conductive
Yellow	$10^6 - 10^{11} \Omega$	Electrostatic dissipative
Red	$10^{12} \Omega - >$	Electrostatic insulating

### *Measuring Resistance to Ground*

- Plug in the supplied grounding cord at one socket of the instrument. The associated internal electrode is disconnected hereby.
- Connect the opposite end of the grounding cord to "ground" or a "groundable point".
- Hold the instrument to the surface like described above and press the button.

### *Other Measurements*

By connecting external electrodes to the instrument's sockets it is possible to measure for example "point to point" resistance, or "volume resistance".

## Packing List

### The SRM 110 includes:

1. Instrument SRM110
2. Carrying bag
3. 9V battery (installed)
4. Grounding cord
5. User's manual
6. Calibration certificate

## Technical Data

Dimension:	130 x 65 x 31mm (L x B x H)
Weight:	240 g
Power supply:	9V battery or NiMH rechargeable battery
Test range:	$10^3 - 10^{12} \Omega$
Test voltage:	10V / 100V (automatic ranging)

## Notice

This instrument is **not** approved for measurements in explosion hazard areas!

High electrostatic charges or measuring insulating highly charged materials might damage the instrument!



Using the instrument in power plants is **not** permitted.

## Maintenance

When the (>)-LED flashes during measurement, it is due to replace the 9V battery. Open the back cover of the instrument by unscrewing the four screws. Take care of the polarity.

## Calibration

The recommended calibration interval is 2 years.