

## EP0201133 Miniprobe

Battery-operated two-point resistance probe for measuring surface resistance on uneven or small surfaces.



### Description

The Miniprobe is a battery-operated test device with two gold-plated, spring-loaded pins and conductive rubber electrodes at the contact point. It is designed for quick surface resistance testing for ESD control applications in electronics manufacturing or handling environments. The two electrodes have a diameter of 3.2 mm and a distance of 6.4 mm between the centres.

**NOTE:** The portable surface resistance probe is only intended for quick test applications.

### Packaging

- 1 Portable surface resistance probe
- 1 Protective cover for buttons
- 1 probe cap, 2 spare pins



### Operation

#### PRE-TEST PROCEDURE

1. remove the protective cap from the test probe. Slide the protective cap off the probe.
2. point the probe away from any surface. Press the TEST button. Make sure that the red LED >12 lights up. This confirms the functionality of the probe's high-end measuring scale and its battery.
3. press the spring-loaded pins onto a metal surface, e.g. a coin, until the probe stops. Press the TEST button. Make sure that the yellow LED <3 lights up. This checks the functionality of the lower measuring scale of the probe.

## TEST PROCEDURE

- 1 Place the sample to be tested on an insulating surface.
2. point the spring-loaded pins at the surface of the material to be tested. Ensure that the rubber electrodes of the pins lie flat on the material.
3. press the spring-loaded pins onto the sample until the probe limiter makes contact.
4. press the TEST button until the measurement lights up a single LED on the probe.



## Maintenance

The portable surface resistivity probe requires little maintenance. There are no user serviceable parts. If the probe requires maintenance beyond cleaning or replacing the pins or batteries, please contact customer service.

### BATTERY CHANGE

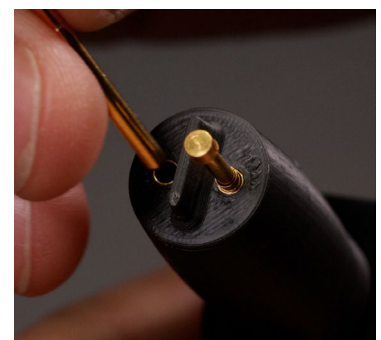
Replace the battery as soon as the LEDs on the probe no longer light up. Open the compartment on the back of the meter to replace the battery. The meter uses a 9V alkaline battery. Make sure that the battery has the correct polarity to avoid possible damage to the circuit.

### CLEANING THE PENS

Wipe the spring-loaded pins regularly with a lint-free cloth moistened with isopropyl alcohol (IPA) to remove any soiling.

### REPLACING THE PINS

Two replacement pins are included in the scope of delivery in case the pins installed in the probe become bent or damaged. Simply pull the damaged pins out of the probe by hand and insert the replacement pins. Push the pins into their sockets until they are at the same height.



## Details

|                        |                                |
|------------------------|--------------------------------|
| POWER SUPPLY           | 9 V alkaline battery           |
| TEST VOLTAGE           | 9 V nominal                    |
| OPERATING TEMPERATURE  | 4°C to 43°C                    |
| STORAGE                | -6.5°C to 49°C                 |
| OPERATION              | %RH 0% to 75% (non-condensing) |
| MEASURING RANGE        | 103 Ohm to 1012 Ohm            |
| Accuracy *             | ±10% of measured range         |
| Weight (with battery)  | 100 g                          |
| Dimensions LxWxH       | 20.3 x 2.5 x 3.8 cm            |
| Contact probe Material | Nickel/silver, gold-plated     |
| Preload Spring force   | 88 g                           |
| Probe pressure         | 227 g                          |
| Contact Probe Travel   | 4.3 mm                         |
| Minimum sample size    | 12.7 mm                        |

\*Die tragbare Oberflächenwiderstandssonde 19301 ist kalibriert, um sicherzustellen, dass die richtigen LEDs aufleuchten, wenn die entsprechenden Lastwiderstände angelegt werden. Alle Lastwiderstände haben eine Genauigkeit von ±10 %. Es werden keine Ansprüche auf die tatsächlichen Widerstandswerte erhoben, die die Änderung der LEDs auslösen.