



ISRAEL'S LEADING COMPANY
for the Electronic Production Environment



SHIRTRONICS is pleased to supply you
with the technical specifications as requested:

Information for Product: #ACL 385 - Surface Resistivity Meter

This compact, hand held meter measures both surface resistivity and resistance to ground with a test range of 103-1012 ohms per square
ACL 385 - Surface Resistivity Meter - The first A Wide Range@ hand held surface resistivity meter. This compact meter measures both Surface Resistivity and Resistance to Ground with a test range from 103 Ohms per square to 1012 Ohms per square.

* CE approved

* Simple repeatable measurements of Conductive, Static Dissipative and Insulative surfaces by the ASTM standard D-257 method of parallel bar sensing

* Checking resistance to ground is as easy as inserting the ground cord into the ground socket

Weight: 6 ounces

Size: 5" X 3" X 1"

Accuracy: +/- 5%

ACL MODEL #385 CALIBRATION INSTRUCTION

The checker should be calibrated on average every 12 months.

A test resistance can be applied across the parallel bars to verify if the checker is within specification, using a resistance decade box.

Calibration can be obtained by contacting your supplier.

SPECIFICATION

Power Supply: 9-volt PP3 alkaline battery

Test Voltage: Nominal 9 volts

Temperature Range:

Operating 40] to 120] F (5] C to 49] C)

Storage (-15] C to + 60] C)

Relative Humidity: 0% to 90% (non-condensing)

Resolution: One order of magnitude

Changeover Point: Ω decade on a logarithmic scale (3.16×10^n)

Changeover Point Accuracy: $\pm \Omega$ decade

Accuracy: $\pm 10\%$

Repeatability: $\pm 5\%$

Weight: 6 ounces

Dimensions: 130mm x 70mm x 25mm

SURFACES RESISTANCE CHECKER CALIBRATION PROCEDURE

This product has been produced using 1% meta film resistors, and high speed OP-AMP Integrated circuits.

The calibration procedure is based upon the product being of linear technology.

The changeover points are determined on resistance and are $\pm \Omega$ decade on a logarithmic scale i.e. (3.16×10^n).

The linearity of the changeover points is ± 10 from the mean value per unit.

TEST EQUIPMENT USED

Resistance Decade Box

Test Leads

The resistance decade box required will need a range of from > 1 kilohm to 999 meg ohms or 109. Measurement greater than 109 are calculated using cad generated techniques, as high resistances greater than 109 are difficult to verify with a test voltage of 9 volts.

Connect the test leads from the resistance decade box to the test probes of the checker, set the decade box to the desired resistance i.e. 103 = 1 K, then press and hold the checker's test button, the 103 LED should light, 10 K 104 LED should light and so on.

To measure the changeover point between decades, increase the resistance of the decade box while pressing the checker's test button. Record the resistance when the next LED lights permanently (this is the changeover resistance).

Example: The first green LED is illuminated 103 = 1 kilohm.

At 3 or 4 kilohms 104 LED is illuminated, the changeover point is 3 or 4 kilohms. 104 = 10 kilohms so between 3 or 4 kilohms and 30 or 40 kilohms will be the changeover points from 104 to 105.