

# Measurement Solution

## Insulation Material Resistivity

SOLUTION BRIEF

Keysight B2985A/87A Electrometer/High Resistance Meter and N1424 Resistivity Cell simplify resistivity characterization of insulation materials by providing accurate resistance or current versus time information in real time. Below are key benefits of the solution.

- Measurements of material's surface or volume resistivity in film or sheet formats
- Meeting various insulation measurement standards such as ASTM D-257
- Resistance Measurement up to  $10\text{ P}\Omega$  ( $10^{16}\ \Omega$ ) for insulation material like ceramics, polymers and rubbers
  - Unmatched current measurement resolution of  $10\text{ aA}$  ( $0.01\text{ fA}$ ) and a built-in  $1,000\text{ V}$  voltage source
- Easy access to Resistivity data at various points provided
  - Timer-based triggering and math functions that can perform calculations on the measurement data at specified times
- Trend graph of the resistivity versus test time viewable from front panel
  - Viewing resistivity changes up until the point at which the final resistivity value is recorded



Refer to the Keysight.com website for product details, technical overviews and other information.

B2980A product page:  
[www.keysight.com/find/b2980a](http://www.keysight.com/find/b2980a)

Sensitive measurement knowledge portal: [www.keysight.com/find/sensitivemeasurement](http://www.keysight.com/find/sensitivemeasurement)



## Measurement System Configuration

- Voltage Source Low Terminal State of the B2985/87A has to be set to “FLOATING”.
- Control switch on the N1413A has to be turned to “PULL” position (Floating DUT).
- Selector switch of the N1424 Volume/Surface Selector Box has to be set properly.



N1413A control switch PULL position



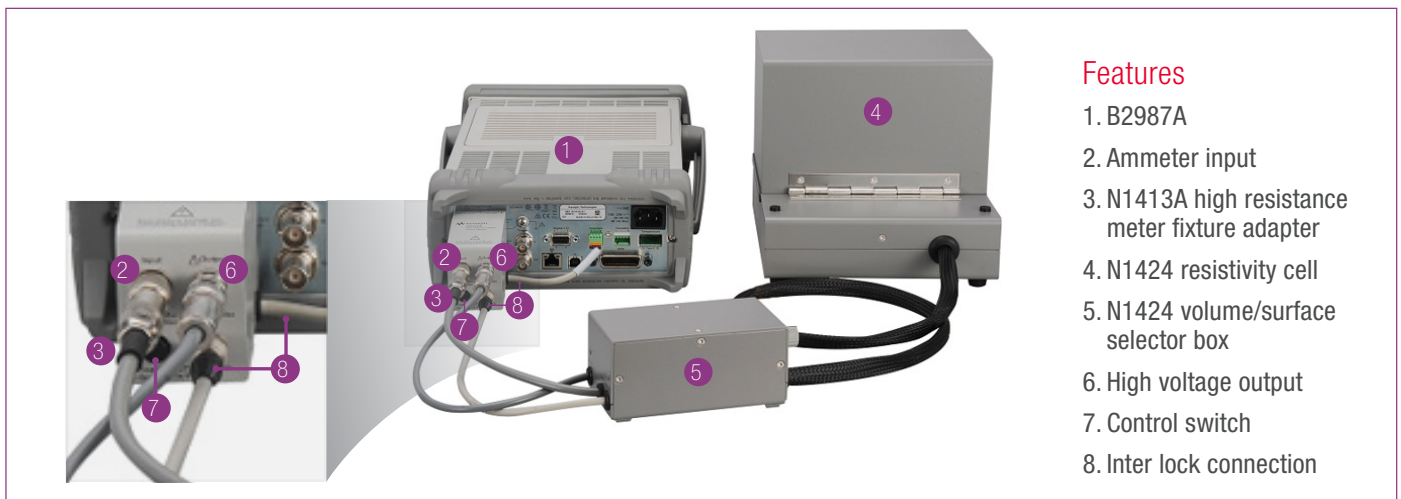
N1424's volume/surface selector box - selector switch



B2985A/87A - voltage source low terminal state



Low terminal state



### Features

1. B2987A
2. Ammeter input
3. N1413A high resistance meter fixture adapter
4. N1424 resistivity cell
5. N1424 volume/surface selector box
6. High voltage output
7. Control switch
8. Inter lock connection

## Ordering Information

Model	Description	Qty
B2985A/87A	Electrometer/high resistance meter	1
N1413A	High resistance meter fixture adapter	1
N1424A/B/C	Resistivity cell for N1413 with B2980 Series	1

Learn more at: [www.keysight.com](http://www.keysight.com)

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: [www.keysight.com/find/contactus](http://www.keysight.com/find/contactus)

