

Dielectric constant kit for solids and liquids

Determination of dielectric measurement of different materials

Special Features

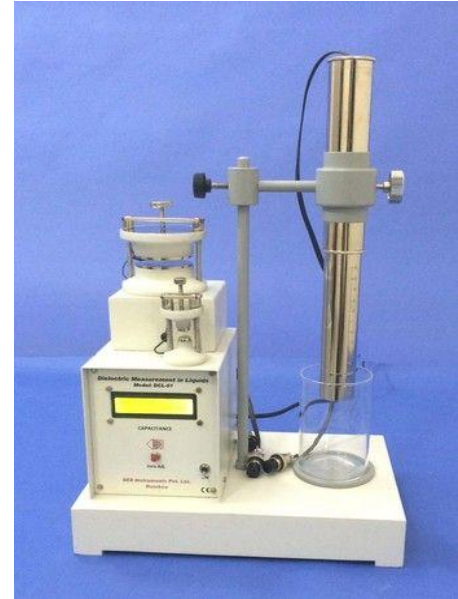
- ✓ High Precision
- ✓ Smooth movement
- ✓ Accurate measurement
- ✓ Easy change of sample

System Description

1. Probes Arrangement

Three probe arrangements are provided with the setup. For solids, two different size arrangements are given, one for 10mm sample pellets and the other for 50mm sample pellets. Both consist of parallel plates set in insulated medium. Sturdy parallel wire lead is used to minimize external disturbance.

For liquids a separate arrangement is provided consisting of two polished brass cylinders fixed coaxially with insulating gaskets at the two ends. These gaskets have holes, in the lower one for allowing the experimental liquid to flow in between the cylinders, and in the upper one for communication with the atmosphere. This arrangement is mounted vertically and can be moved up and down with a rack-and-pinion set-up. It is put in a vessel containing the experimental liquid. The outer surface of the outer cylinder has a vertical scale to measure the height of the liquid within the cylinders. Proper leads are provided for connection to the Capacitance Meter.



2. Samples

Glass, Bakelite, Barium Titanate, Lead Titanate, Carbon Tetrachloride Liquid

3. Digital Capacitance Meter

This is a compact direct reading microcontroller based high resolution instrument for the measurement of capacitance of the sample.

Specifications

Range : 0pf – 50mf

Resolution : 0.01pf

Display : 16 x 2 LCD display with back light

Accuracy : Better than 1%

Zero Setting : Push button zero setting