

MEASUREMENT OF EMF & UNKNOWN RESISTANCE BY CROMPTON POTENTIOMETER

OMEGA TYPE ES-326



OMEGA TYPE ES-326 Experimental Set-Up has been designed specifically to measure EMF & unknown resistance by Crompton Potentiometer. The set-up consists of Crompton Potentiometer, Cell Eliminator, Digital Electronic Standard Cell, Digital Electronic Null Detector, Potentiometer Power Supply, set of unknown resistance and DC Ammeter etc.

The set up is complete in all respect and requires no other apparatus. Practical experience on this set up carries great educative value for Science and Engineering Students.

OBJECT

- 01 To measure EMF by Crompton Potentiometer.
- 02 To measure unknown resistance by Crompton Potentiometer.

FEATURES

The complete experimental Set-up consists of:

- 01 Crompton Potentiometer:
 - Direct reading type, consisting of 7 coils and a circular slide wire. The scale is divided into 250 parts with potential drop of 250 milli volts, Direct reading, with arrangement for stand arising with a standard cell, fine & course Rheostats are provided for adjusting the slide wire voltage. Range 0.001 to 1.75 volts.
- 02 Digital Electronic D.C. Null Detector OMEGATYPE DND-023
 In place of Galvanometer for better accuracy. Working Voltage: 230 V AC ± 10% at 50 Hz.
- 03 Digital Electronic Standard Cell OMEGATYPE DEC-605
 - Voltage output: 1.018 Volts Accuracy: $0.005\% \pm 3\frac{1}{2}$ digit with display. Working Voltage: 230 V \pm 10% at 50 Hz.
- 04 Potentiometer Power Supply OMEGATYPE PPS-4/2 (2V/4V at 2Amp.) This gives fixed IC regulated outputs 2 and 4 Volt Supply DC at 2 Amp. with over load and short circuit protection.
- 05 Cell Eliminator OMEGATYPE CE-1V5
 - This is an Electronic Leclanche Cell works on 230V AC and gives regulated output of 1V5 DC. (Leclanche Cell 1V5)
- 06. Potentiometer OMEGATYPE POT-10
 - Wirewound potentio-meter mounted with three terminals 10 ohm 1 Watt.
- 07. D.C. Ammeter OMEGATYPE MO-65
 - 65mm round dial, mounted on bakelite stand, to read 0-100mA.
- 08. Unknown Resistance
 - Set of four unknown OMEGATYPE RB-105 mounted on a board with terminals Resistance
- 09 Standard Resistence OMEGATYPE FR-105. 20 ohms/1W
- 10 Adquate no. of connecting wires.
- 11 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

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