Order Code - 55865
Identification of Charge Type By Hall Voltage Measurement

55865 Experimental Set Up has been designed specifically for identification of charge type by hall voltage measurement. The set-up consists of Hall Effect Board, Hall Probe, Electromagnet, Constant Current Power supply (0-4A), and hall probe stand. 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

Identificaation of charge type by hall voltage measurement

FEATURES

The complete Experimental Set-up consists of the following :

01 HALLEFFECTBOARD : It consists of a digital meter to read Hall voltage (0-200mV) and probe current (0-20mA) (DIGITAL) selectable by a switch .It also provide constant current power supply. Variation in current is achieved by a potentiometer provided.

SPECIFICATIONS : AMMETER VOLTMETER

Range	:	0-20 mA 0-200mV
Resolution	:	10 uA 0.1mV

02 HALL PROBE TWO NOS. : Germanium Single Crystal N and P -type with four spring type pressure contact is mounted on a sunmica bakelite strip.

TECHNICALDETAILS

Material	:	Ge single crystal n or p-type as desired.
Resistivity	:	8-10 ohm.cm.
Contacts	:	Spring type (solid silver)
Zero-field potential	:	< 1mV (adjustable)
Hall Voltage	:	25-35mV/10 mA/KG

03 ELECTROMAGNET : The electromagnet have the most widely used 'U' shaped soft iron yoke. The soft iron is of a special quality, structurally uniform, well machined and finished to meet the rigid standards.

SPECIFICATIONS

Field intensity	:	7.5 KG at 10mm air-gap which flat pole pieces.
Pole pieces	:	50mm diameter.
Energising coils	:	Two, each a resistance of about 3.0 ohm.
Power requirement	:	0-30V DC, 4A, its coils are connected in series.

04 CONSTANT CURRENTPOWER SUPPLY

Current range	:	0 - 4 Amp.
Load regulation	:	Better than 0.5% of the highest specified output current. (No Load to Full Load)
Line regulation	:	Better than ± 2% of the specified output current. (For ±10% Mains Variation)
Metering	:	3 ½ digit 7 segment LED DPM.

05 HALLPORBE STAND (WOODEN)
06 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 1/2 metre
07 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
08 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

Note: Specifications are subject to change.

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