



OMEGA TYPE ES-365 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 HALL EFFECT BOARD (DIGITAL) : It consists of a digital meter to read Hall voltage (0-200mV) and probe current (0-20mA) selectable by a switch .It also provide constant current power supply. Variation in current is achieved by a potentiometer provided. OMEGATYPE HEB-248

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

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

TECHNICAL DETAILS
Material : Ge single crystal N and P-type.
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 CURRENT POWER SUPPLY OMEGATYPE CCP-30/4
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 $\pm 2\%$ of the specified output current.
(For $\pm 10\%$ Mains Variation)
Metering : 3 ½ digit 7 segment LED DPM.

05 HALL PORBE 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.

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

OMEGA ELECTRONICS