

## IV-E192A Hall Effect Experimental Setup ( In Temperature )



Hall Effect is an instrument to determination of mobility of charge carriers.

### Experiment :

- Hall Effect is an instrument to determination of mobility of charge carriers.

### Apparatus Supply :

- ELECTROMAGNET
- DIGITAL POWER SUPPLY FOR ELECTROMAGNET
- DIGITAL GAUSS METER
- CONSTANT CURRENT POWER SUPPLY
- WOODEN STAND
- HALL CRYSTALS
- N and P Type Hall Crystal Mounted on PCB
- Termination: 4Nos. (2mm for Voltage and 4mm for Current)
- 10mm Rod mounted on PCB to be Hold at Wooden Stand
- Type: N
- Size: 10mmx8mm
- Thickness:

|   |                         |
|---|-------------------------|
| Resistivity x 10 <sup>2</sup> (.m) at room temperature                    | 0.8027                  |
| Hall Coefficient x 10 <sup>6</sup> (m <sup>3</sup> coulomb <sup>4</sup> ) | -6680                   |
| Type  | N                       |
| Mobility x 10 (m <sup>2</sup> /V.s)                                       | 257.006                 |
| Carrier concentration x 10 <sup>5</sup> (m <sup>3</sup> )                 | 3.92 x 10 <sup>15</sup> |