



**Nvis 6103 e/m Measurement Setup** is a very useful product for Physics and Basic Science Laboratories. This is used to find the specific charge density of an electron particle in a CRT by Thomson method using BAR magnet. This system is provided with a power supply unit for CRT and Deflection Magnetometer with stand arrangement and mounting stand for CRT. Nvis 6103 is a microcontroller based instrument with LCD display for displaying deflection voltage. It is highly secure and stable system.

### Features

- Microcontroller based power supply instrument for CRT
- LCD to measure deflection voltage
- Focusing adjustment provided
- Intensity adjustment provided
- Cathode Ray Tube mounting on acrylic stand
- Deflection magnetometer provided
- Octal socket provided on the front panel of power supply for connecting CRT
- Provided with Pair of bar magnet and Compass Box
- Online product tutorial

### Scope of Learning

- Determining the value of specific charge  $e/m$  of an electron by Thomson Method

### Technical Specifications

#### Cathode Ray Tube

Distance between Plates	: $d=1.4\text{cm}$
Length of Plates	: $l=3.23\text{cm}$
Distance between Screen and Plates (edge)	: $L=14.5\text{cm}$

**Focusing Voltage** : Variable 0 - 300V DC

**Intensity Adjustment Voltage** : Variable 0 - 60V DC

**Deflection Voltage** : Variable 0 - 50V

**Scale** : 0 - 30cm each side

**CRT connection** : Octal socket

**LCD** : 16 x 2 Characters

**Deflection magnetometer** : 0 to 90°

**Mains** : 230V AC  $\pm 10\%$ , 50Hz

**Fuse** : 500mA

**Dimension of Power Supply(mm)** : W 215 x D 195 x H 130