



# Geiger Muller Counting System

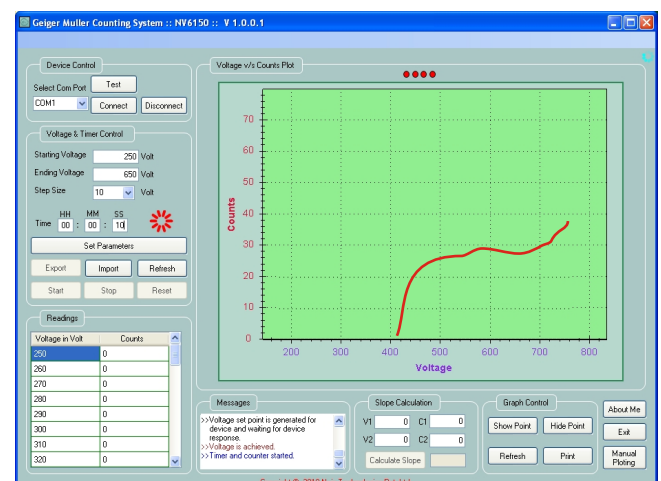
Nvis 6150



**Nvis 6150 Geiger Muller Counting System** is a versatile Counting System designed to count Beta and Gamma radiation. It is useful in research laboratories as well as in academic field for teaching Radioactivity and its application. This setup consists of a highly accurate digital counter with user-friendly control for the time and count settings. A highly stable high voltage variable power supply with coarse and fine adjustments facilitates smooth operation of GM detector. A GM detector is a cylindrical tube with a thin membrane on one end containing a low-pressure gas. It is mounted on a specially designed graduated bench. Microcontroller design facilitates both automatic and manual mode for counting.

## Features

- Microcontroller based design
- Large digital display for simultaneous reading of voltage
- Preset time and counts
- BNC connector to directly measure pulses on Oscilloscope
- Wide range digital timer
- High counts capacity
- LED indication for counts, GM probe and high voltage
- Audio indication at the end of counting
- Threshold level adjustment
- PC interfacing with the facility of automatic graph plotting
- Online product tutorial



Software window showing characteristic of Voltage v/s Count Rate  
Note book PC (optional)



# Geiger Muller Counting System

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## Scope of Learning

- Study of characteristic curve (plateau curve) of Geiger Muller Tube
- Study of Pulse Height versus Operating Voltage of GM tube
- Verification of Inverse Square Law
- Calculation of absorption of Beta and Gamma radiation

## Technical Specifications

### GM Tube

Detection	: Gamma detection
Operating Voltage	: 400 - 700V
Dimension	
Length	: 88mm
Diameter	: 35mm

### Source

Type	: Gamma
Isotope	: Cs-137 (0.5 microcurie)
Dia	: 6 mm

### GM Bench

Length	: 50cm
Scale	: 50cm with least count of 1mm

**Counts** : 0-999999

**Time preset** : upto 10 hours with 1 to 60 second increment/decrement

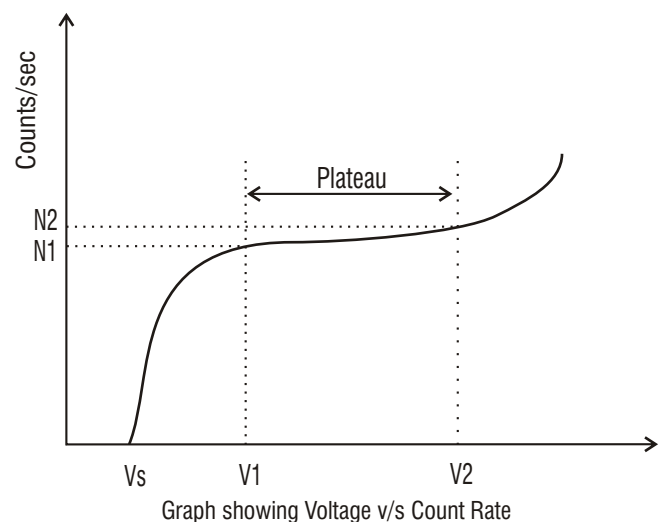
**High Voltage Output Adjustment** : 0-800V with coarse and fine

**Display** : High Contrast LCD 20 x 4

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

**Fuse** : 1A

**Interfacing** : RS232, USB



Designed & Manufactured in India by

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