## **Technical Data**



## Nal SCINTILLATION DETECTOR (Size 2"x2" Flat Type) TYPE : SD 152

## FEATURES :

- □ 2"x2" Nal Integral assembly
- □ Resolution for Cs-137 better than 8.5%
- Operating Voltage 700V to 900V
- Recommended for use with NUCLEONIX make Gamma Ray Spectrometers
- 2" Bialkali Phototube with mu metal magnetic / light shielding

NUCLEONIX Scintillation Detector (2"x2" - Flat Type) SD152 is designed to be used with Gamma Ray Spectrometer GR611M (Modular) or Integral model GR612 or its equivalent unit. The integral assembly consists of Nal

(TI) crystal size  $2^{n}x2^{n}$ , integrally coupled to a 2 inch bialkali phototube with mu-metal magnetic / light shield. The crystal and the photomultiplier tube are housed in an aluminium container.

The assembly is connected to a solid state Pre-amplifier PA311 of NUCLEONIX make. Connectors are provided on Pre-amplifier for EHT, low voltage and signal output. The complete Scintillation Detector can be housed in a Lead Shield. The pre-amplifier is designed to suit a wide range of standard Scintillation detectors.

## Transducer :

Flat type Integral assembly

Phospher : Nal (TI), 2x2 inches crystal
Photomultiplier : 2" Bialkali phototube
with mu metal magnetic/light shielding.
Operating Voltage : 700 - 900V

SPECIFICATIONS

Resolution : Better than 8.5% with Cs-137 Pre-amplifier : Built-in Gain (Approx) : 25 Noise : (rms referred to input) Less than 50 micro volts Output : Positive tail pulse Output Impedance : 90 Ohms Power Requirement : (Typical) -12V @12mA