

**NaI SCINTILLATION DETECTOR  
(Size 3"x3" Flat Type)  
TYPE : SD 153**

Technical Data



**FEATURES :**

- 3"x3" NaI Integral assembly.
- Resolution for Cs-137 better than 9.5%.
- Operating Voltage 750V to 900V.
- Recommended for use with NUCLEONIX make Gamma Ray Spectrometers.
- 3" Bialkali Phototube with mu metal magnetic / light shielding.

NUCLEONIX **Scintillation Detector (3"x3" - Flat Type) SD153** is designed to be used with Gamma Ray Spectrometer GR611M (Modular) or its equivalent unit.

The integral assembly consists of NaI (TI) crystal size 3"x3", integrally coupled to a 3 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.

**SPECIFICATIONS**

**Transducer :** Flat type Integral assembly  
**Phosphor :** NaI (TI), 3x3 inches crystal  
**Photomultiplier :** 3" Bialkali phototube with mu metal magnetic/light shielding.  
**Operating Voltage :** 750 - 900V

**Resolution :** Better than 9.5% 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