

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

Technical Data



**FEATURES :**

- 3"x3" NaI (well type) Integral assembly.
- Resolution for Cs-137 better than 9%.
- Operating Voltage 750V to 900V.
- Recommended for use with NUCLEONIX make Gamma Ray Spectrometers.
- 3" Biakali Phototube with mu metal magnetic / light shielding.

NUCLEONIX **Scintillation Detector (3"x3" - Well Type) SD153W** 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 biakali 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. Well type detectors are recommended for Radiochemistry works.

**SPECIFICATIONS**

**Transducer** :Well type Integral assembly  
**Phosphor** : NaI (TI), 3x3 inches crystal  
**Photomultiplier** : 3" Biakali phototube with mu metal magnetic/light shielding.  
**Well Size** :  
 0.656" (dia) X 2.06" depth  
**Operating Voltage** : 750 - 900V

**Resolution** : Better than 9% 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