

Nal SCINTILLATION DETECTOR
(Size 1"x1" Flat Type)
TYPE : SD 150

Technical Data



FEATURES :

- 1.5"x1.5" Nal Integral assembly.
- Resolution for Cs-137 better than 7.5%.
- Operating Voltage 500V to 600V.
- Recommended for use with NUCLEONIX make Gamma Ray Spectrometers.
- Ideal choice for teaching lab experiments in Universities & P.G colleges in Physics.

NUCLEONIX Scintillation Detector (1.5"x1.5" - Flat Type) SD150 is designed to be used with Gamma Ray Spectrometer (Integral) Type GR612 or modular system Type GR611M or its equivalent unit. The integral assembly consists of Nal (TI) crystal size 1.5"x1.5", integrally coupled to a 1^{1/2} 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.

SPECIFICATIONS

Transducer : Flat type Integral assembly.

Phosphor : Nal (TI), 1x1 inches crystal.

Photomultiplier : 1^{1/2} inch PMT with mu metal magnetic/light shielding.

Operating Voltage : 650 - 850V.

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.

Application : u 8 k o 8k ...