Technical Data

NaI SCINTILLATION DETECTOR (Size 2”x2” Well Type)

TYPE : SD 152W

FEATURES :

- ❑ 2”x2” NaI (well type) Integral assembly
- ❑ Resolution for Cs-137 better than 9%
- ❑ 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” - Well Type) SD152W** is designed to be used with Gamma Ray Spectrometer GR611M (Modular) or Integral model GR612 or its equivalent unit.

The integral assembly consists of NaI (Tl) crystal size 2”x2”, 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. Well type detectors are recommended for Radiochemistry works.

SPECIFICATIONS

Transducer : Well type Integral assembly

Phosphor : NaI (Tl), 2x2 inches crystal

Photomultiplier : 2” Bialkali phototube with mu metal magnetic/light shielding.

Well Size : (options)
i. 0.75" dia x 1.43" deep*

Operating Voltage : 700 - 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