

1. Overview

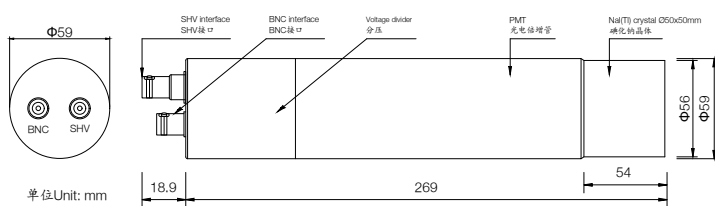


The detector consists of an Nal crystal, a photomultiplier tube, a voltage divider circuit, and various other components. The Nal detector, known for its excellent energy resolution, low radiation background, and compact structure, is widely used in various fields such as nuclear physics experiments, industrial measurement and control, and environmental monitoring, it has extremely high reliability.

2. Main technical parameters

- Power input 0 ~ +1500V
- Dimensions of the scintillator $\Phi 50 \times 50$ mm
- Interface Type BNC、SHV
- Energy resolution $\leq 7.5\%$ @ 662keV (^{137}Cs)
- Operating temperature $+5^{\circ}\text{C} \sim +40^{\circ}\text{C}$
- Storage temperature $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- Storage humidity 10% - 85%RH (Non-condensation)

3. Outline Dimensional Drawing

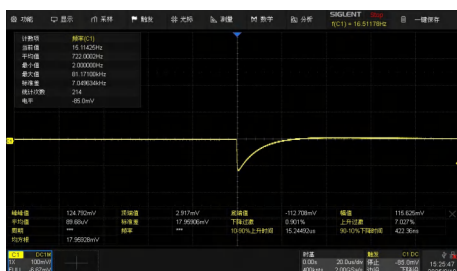


Interface Definition

serial number	Interface	Definition
1	SHV	Positive polarity high voltage input
2	BNC	Negative polarity signal output

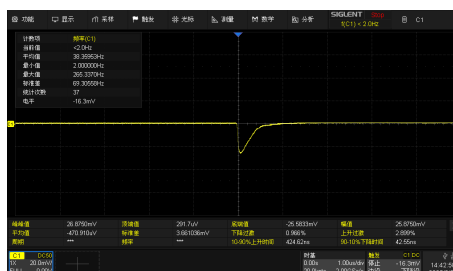
4. Waveform Test/ Energy Resolution Test

● Waveform test



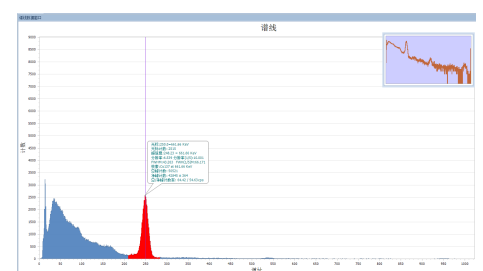
Oscilloscope input impedance 1MΩ (450V)

● Waveform test



Oscilloscope input impedance 50Ω (450V)

● Spectral test



Power input: 450V Radioactive source: Cs137
@661.66keV Energy resolution: 6.539%