

1. Overview

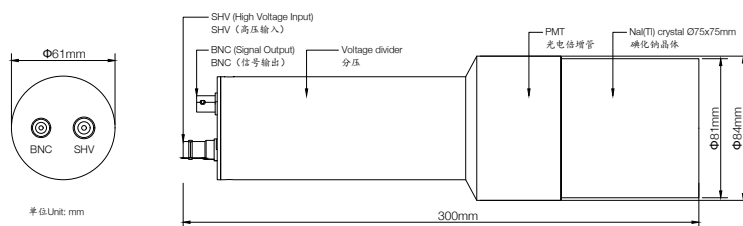


The detector consists of an Nal crystal, photomultiplier tube, voltage divider circuit, and various other components. This detector uses large-sized crystals with high detection efficiency. The Nal detector, with their excellent energy resolution and low radiation background, is widely used in various fields such as nuclear physics experiments, industrial measurement and control, and environmental monitoring, with extremely high reliability and sensitivity.

2. Main technical parameters

- ▶ Power input 0 ~ +1500V
- ▶ Dimensions of the scintillator $\Phi 75 \times 75$ 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

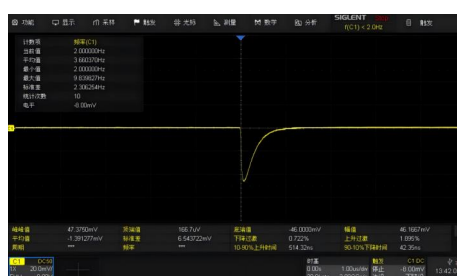
4. Waveform Test/ Energy Resolution Test

● Waveform test



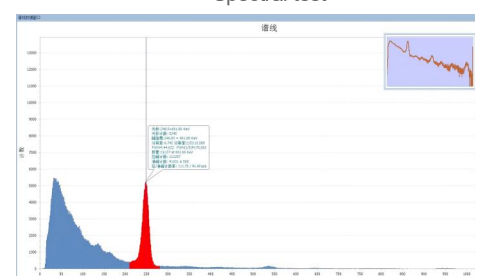
Oscilloscope input impedance 1MΩ (600V)

● Waveform test



Oscilloscope input impedance 50Ω (600V)

● Spectral test



Power input: 600V Radioactive source: Cs137
@661.66keV Energy resolution: 6.745%