

1. Overview



ECZT-E2001 CPG detector uses a room temperature semiconductor CZT (Cadmium Zinc Telluride) detector with a coplanar grid structure and a single power supply low noise dual differential amplification circuit. It features an internal gate bias circuit and preamplifier signal output, making it an ideal choice for high-resolution portable spectrometry applications in areas such as national security, health physics, gamma energy Spectrum measurement teaching and research etc.

2. Product Features

- ▶ 1 Operate at room Temperature
- ▶ 2 High Energy Resolution
- ▶ 3 Symmetrical Peak Shape with No Tailing
- ▶ 4 Good Angular Response
- ▶ 5 High photopeak to Compton ratio
- ▶ 6 Small Size, High Sensitivity

3. Main Technical Parameters

Detector Type	CZT Coplanar Grid Detector	Peak Drift (8 hours)	<1%	Enclosure Material	Aluminum Alloy
Crystal Size	10x 10 x 10mm ³	High Voltage Supply	-1200V	Protection Rating	IP65
Dose Rate Range	0.1 uSv/h~10 mSv/h	Low Voltage Supply	+12V	Operating Temperature	-10°C~+40°C
Measurement Accuracy	<± 15% @ ¹³⁷ Cs	Power Consumption	<30mA	Relative Humidity	20%~70%, no condensation
Measurement Range	30 keV~3 MeV	Signal Output	Positive Polarity Exponential Decay Signal	Dimensions	Φ30mm X H76mm
Energy Resolution	Better than 2% @662 keV (Room Temperature)	Interface	4-pin LEMO Connector	Weight	60g

4. Energy Spectrum

