SiPM Energy Spectrum Detector

ECSINA-D76H76SIPM01

上海烁杰晶体材料有限公司

1.Product introduction

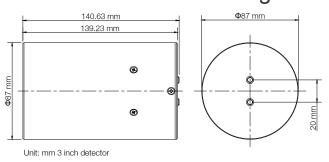


The ECSINA-D76H76SIPM01 is a highly integrated detector that seamlessly combines a 3-inch CsI(Na) scintillation crystal, a 3-inch ONSEMI J60035 SiPM array, and a dedicated summing and pre-amplification circuit into a single, compact module. At its core, the CsI(Na) scintillation crystal's emission spectrum is perfectly matched to the peak response wavelength of the SiPM array. This optimized pairing ensures the detector's exceptional energy resolution. This product offers a multitude of advantages, including intuitive operation, robust durability, reliable performance, and a compact structure. With these features, the ECSINA-D76H76SIPM01 has become the ideal choice for applications in security screening, nuclear radiation monitoring, and high-energy physics, providing users with precise and reliable measurement solutions.

2.Performance parameter

Parameters	value	Unit
Scintillator type	CsI(Na)	
Scintillator size	Ф76×76	mm
SiPM Array	64 pcs ONSEMI J60035	1
Input voltage	5 to 12V DC	V
Output Signal Polarity	Positive Polarity	1
Energy Resolution(137Cs)	≤8.5%	
Operating Temperature	-40 to +55	°C
~300mV@662keV	Maximum Signal 1.5V	V

3. External dimensions diagram

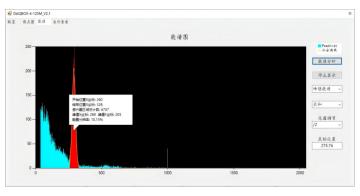


Interface Definition

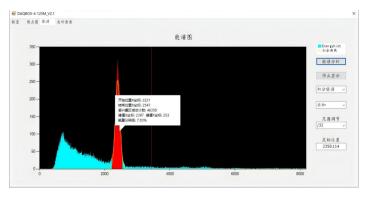


- 1 Signal: Purple-marked male MCX connector
- 2 Power Supply: Red-marked male MCX connector

4. Energy Spectrum



Cs-137 energy spectrum(peak): 289mV@662keV



Cs-137 energy spectrum(area): 7.03%@662keV