



SiPM encapsulation detector



Function introduction:

SiPM packaged scintillation detectors have the advantages of compactness, robustness, low voltage and magnetic field insensitivity compared to traditional PMT packaged detectors. SiPM require much lower power than PMT, operate at typically 20 to 30 times lower voltages, and also have higher photon detection efficiencies for scintillation light, resulting in larger signals and thus achieve higher signal-to-noise ratios. PMT is strongly affected by magnetic fields, while SiPM is insensitive to magnetic fields. SiPM provide all the benefits of solid-state sensors while still achieving the low-light detection capabilities of PMT, it is a packaging solution with significant advantages.

In addition, the SiPM unit can have a small size and can be flexibly configured during crystal packaging, providing SiPM packaging solutions for scintillator crystals of various shapes, taking into account system performance and packaging costs, and meeting user needs with maximum flexibility.

Parameters:

Crystal	LaBr3(Ce)		NaI(Tl)
Size	Φ1.5x1.5inch		Φ3x3inch
Energy resolution (Cs137)	≤3.2%		≤7.0%
Energy range	25KeV~3MeV		30KeV~3MeV
Operating temperature	-40℃~50℃, ≤90%		
Signal amplitude	0-2V		
Power supply	DC5V		
Output polarity	Positive		
Constant	500ns		1us
Interface	SMA		
Weight	375g		1800g
Dimension	Φ49x78mm		Φ86x122mm