

## SD1101(2"x2" NaI(Tl) detectors)

**SD1101 NaI(Tl) detector** is a high efficiency scintillation detector consisting of a NaI(Tl) crystal in an Aluminum housing, a photomultiplier tube, an internal magnetic/light shield, a high-voltage power supply(HVPS), a voltage divider and preamplifier circuit board, it can directly output the negative pulse signal. SD1101 NaI(Tl) detectors have a proven record of long term reliability and stability. Typical energy resolutions are  $\leq 8\%$ fwhm at 662keV.



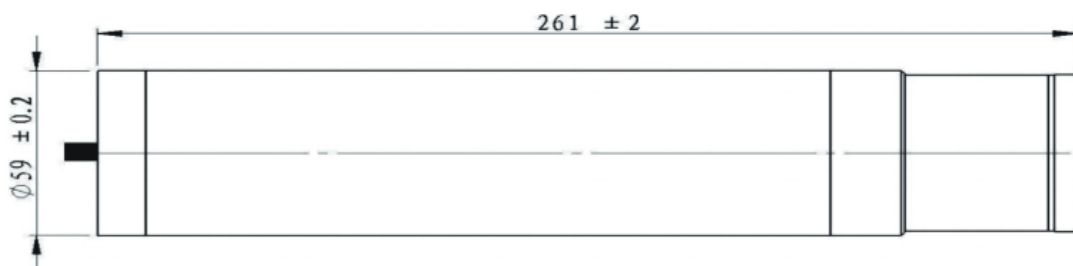
### Modules or types

#### Specification of SD1101(2"x2" NaI(Tl) detectors)

25°C

SD1101(2"x2" NaI(Tl) detectors)		Value	Unit
Detector	Scintillator	NaI(Tl) crystal	---
		Dia.50x50	mm
	Photomultiplier Tube	Hamamatsu CR105	---
	HVPS	Internally Installed	---
	Voltage Divider	Internally Installed	---
	Preamplifier	Internally Installed	---
Performance	Detection Object	Gamma-Ray	---
	Energy Resolution	$\leq 8.0\%$ @662KeV(Cs-137)	---
	Output Signal	Negative Pulse Signal	---
1.0V@662KeV(Cs-137)		---	
Operating environment	Input Voltage	+12±0.5	V
	Operating Temperature	0~40	°C
Storage and Transportation Environment	Temperature	-22~+55	°C
	Humidness	$\leq 70\%$	---

#### Diemnsion and Connection(Unit: mm):



Dimension of SD1101

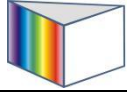
Cable	Red Cable	Black Cable	Green Cable	White Cable	Cable Shielding Bushing
Cable Definition	+12V Input Voltage	Power Ground	Signal Output	Signal Ground	Grounding

### Cable Definition and Function

**Note:** This detector is directly connected with the cable, it doesn't have interface connector. (Cable length is 1m)

#### Matters need attention:

- 1) Each detector is thoroughly tested before shipping and comes with a 12 months guarantee, we are responsible for the repair, replacement within the warranty period, and provide technical support. Please don't disassemble the detector by yourself, in case of any questions please contact us.
- 2) The packaged product allows to transport by cars, trains, airplanes, ships and other transportation vehicles, transportation should prevent severe shock, severe vibration, rain and so on.
- 3) Scintillation detector should be stored in a cool, dry environment.
- 4) Please pay attention to the input voltage value and polarity, improper input voltage will lead to the detector does not work and even damage.
- 5) The cable should be correctly connected to the connector, incorrect connection may lead to detector damage.



**Shalom EO**  
Crystals, optics and components

Hangzhou Shalom Electro-optics Technology Co., Ltd.

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