

SD1105(3"x3" NaI(Tl) detector)

SD1105 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. SD1105 NaI(Tl) detectors have a proven record of long term reliability and stability. Typical energy resolutions are $\leq 8\%$ fwhm at 662keV.



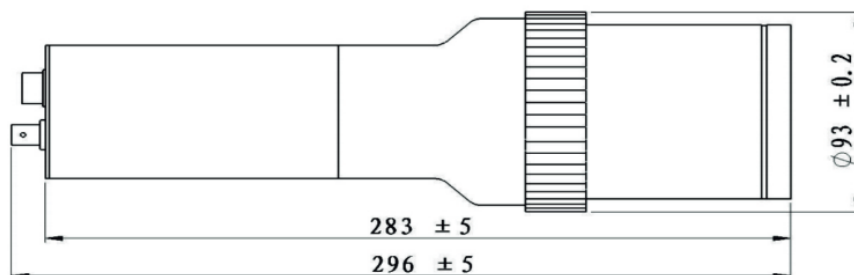
Modules or types

Specification of SD1105(3"x3" NaI(Tl) detectors)

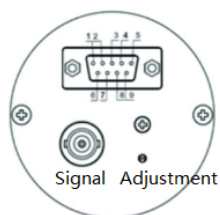
25°C

SD1105(3"x3" NaI(Tl) detectors)		Value	Unit
Detector	Scintillator	Low Background NaI(Tl) crystal	---
		Dia.75x75	mm
	Photomultiplier Tube	Hamamatsu CR160	---
	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	$\leq 70\%$	---

Dimension and Connection(Unit: mm):



Dimension of SD1105



Interface diagram

Connector	DB 9 Core Socket-4	DB 9 Core Socket-1	DB 9 Core Socket-2	Signal Connector
Cable	DB 9 Cable	DB 9 Cable	DB 9 Cable	BNC Cable
Cable Definition	+12V Input Voltage	Grounding	Grounding	Signal Output

Connector Type and Cable Definition

Note: The potentiometer adjustment is used to adjust the internal HV, clockwise adjustment is for increasing the HV, counterclockwise adjustment is for reducing the HV.

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.