

Detailed Specifications –

Scintillation Detector consisting of 51 mm diameter, 51 mm high NaI (TI) Crystal, coupled integrally to a 51 mm diameter Photomultiplier Tube (PMT) with 14 pin connector. Aluminium crystal housing with solid Mu-Metal light shield around PMT. PMT specifications are given below. Energy Resolution < 7.5% FWHM @ 662 keV. 14 pin Plug-on B14A socket for the above (drawing attached).

Specifications of PMT 9266B –

S. No.	Characteristics	Value
1.	NaI(Tl) detector size	2" x 2"
2.	Photocathode Active diameter	48 mm
3.	Photocathode Quantum efficiency	30%
4.	Photocathode Luminous sensitivity	70 uA/lm
5.	Nominal anode sensitivity	50 A/lm or better
6.	Maximum anode sensitivity	500 A/lm or better
7.	Dark current at nominal anode sensitivity	0.3 nA or less
8.	Dark current at maximum anode sensitivity	3 nA or less
9.	Gain	$7 \times 10^6$ or better
10.	Aluminium crystal housing	0.5 mm
11.	solid Mu-Metal light shield around PMT	0.63 mm
12.	The external dimension of integral assembly of crystal and PMT	Length (max.)
		Diameter (max.)
13.	Temperature range	-20°C to +65°C



