

**TECHNICAL SPECIFICATION OF ALPHA BETA GAMMA CONTAMINATION  
MONITOR**

S.N.	PARTICULARS	PRESENT SPECIFICATIONS WITH DATE OF FORMULATION (16/06/23)
1.	Types of Radiation to be Detected	Alpha, Beta, Gamma
2.	Detector	Plastic Scintillator coated with ZnS (Ag) – dual phosphor scintillator Phoswich type
3.	Gamma sensitivity	35 cps per $\mu\text{Sv}/\text{hrs}$ or higher
4.	Display	Back-lit TFT /LCD/LED Type
5.	Detector window activearea	Min 100 $\text{cm}^2$
6.	Window Thickness	0.80 to 2.5 $\text{mg}/\text{cm}^2$ aluminized plastic film Sensitive area
7.	Efficiency	20% or more for Am-241for alpha-particle & 30 % or more for Sr/Y-90 Beta particle
8.	Measurement Unit	CPS/CPM (For Alpha and Beta), Bq/ $\text{cm}^2$ (for Alpha), $\mu\text{Sv}/\text{hrs}$ mSv/hrs (for individual dose calculation), $\mu\text{R}/\text{hrs}$ mR/hrs (for Zone marking) (As per applicable ANSI N42.33 standard)
9.	Measuring Range	0 to 10000 cps
10.	Weight	Up to 1.00Kg
11.	Alarm	Acoustic with alarm thresholds for alpha and Beta & Gamma
12.	Battery	Rechargeable batteries (Min 02 Set) along with 230V AC Battery Charger and minimum 06 hours continuous working in single charge.
13.	Rugged and compact	Design, thick rubber protection covers. Must have IP Rating IP52 or above.
14.	Internal Data Memory	1000 measured values with date & time
15.	Operation modes	(a) Scalar/ Timer with pre-set count and pre-set time for sample measurements (b) Continuous rate meter mode for frisker operation (c) Alpha, Beta, and Alpha + Beta modes (d) Gross or net counting
16.	Audible indication	Distinguishable Audio Alarm for Alpha, and Beta+Gamma.
17.	Working Temp.	-20°C to + 50°C
18.	Storage Temp	-20°C to + 60°C
19.	Warranty	One Year from the date of delivery
20.	Carry Case	Customized ABS (Acrylonitrile Butadiene Styrene) case/box (rugged and durable) with PU Foam layer inside and carrying handle.
21.	Spare & service support	Assured supply of spare & maintenance for 10 years

After Corrigendum: -