

Model APCM-2 (DUAL PALM MONITOR)

Wall Mountable Alpha Palm Contamination Monitor



Model APCM-2 is a wall mountable Alpha Palm Contamination Monitor developed for measurement and detection of alpha contamination on Palm. APCM-2 is designed and manufactured indigenously by Para Electronics Mfg. Division of Electronic Enterprises (I) Pvt. Ltd., Mumbai, India.

Model APCM-2 uses 2 nos. of $180 \times 115 \text{ mm}^2$ ZnS(Ag) based Alpha Scintillator mounted on 78 mm dia PMT for detection of Alpha Particles on palm/hand. This detectors are covered with Mylar layers to protect it from ambient light. A demountable hexagonal SS mesh is provided on the Mylar layer to protect it from accidental touching and damaging it. It is also possible to remove this SS mesh for decontamination if required.

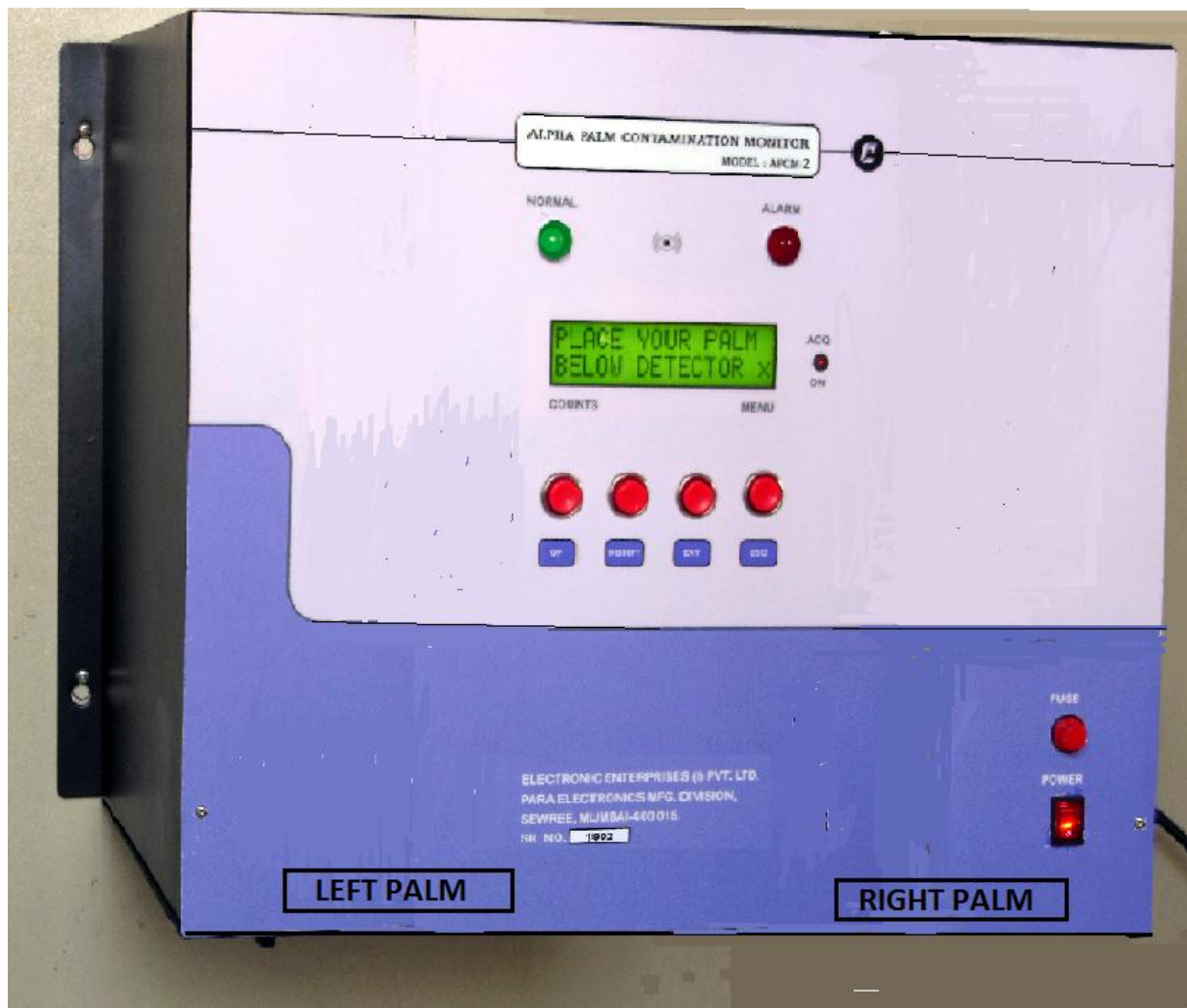
The detector is mounted upside down so that the palm can be held below the SS mesh, thereby reducing the chances of alpha particles falling on active area of the detector. One IR sensor and other touch switch sensor detect the presence of palm automatically. This will automatically start the measurement for preset time. At the end of measurement, if the measured value is greater than the set alarm value, appropriate message, and audio, visual alarm indications are provided. Should the palm moves during the measurement time, the measurement is aborted with message on LCD.

Model APCM-2 is a mains operated unit which includes the HV supply for detector, front end electronics and micro controller for all the operations. Setup mode allows user to set the counting time, alarm level (CPS) and background subtraction ON or OFF. While there is no palm under the detector, instrument measures the background level which is used for getting the net counts in CPS for alarm activation.



**Hexagonal Removable
Stainless Steel Mesh**

Model APCM-2 is useful for detection of alpha contamination on palms. It is designed for ease of measurement to be used for health physics application in nuclear facilities like R&D labs, nuclear power plants etc.



Specifications : Wall Mountable Alpha Palm Contamination Monitor



Parameter	APCM-2	
Contamination detected	Alpha	
Detector	LEFT	128 mm (L) x 118 mm (W), ZnS(Ag) Scintillator on 78 mm dia PMT with Perspex light guide
	RIGHT	128 mm (L) x 118 mm (W), ZnS(Ag) Scintillator on 78 mm dia PMT with Perspex light guide
SS Mesh Arrangement	Removable Hexagonal SS mesh for decontamination	
Display	2 x 16 char. LCD for menu and other messages	
Keypad	4 Keys to set the parameters	
Palm Detection	LEFT	Automatic using one IR switch and one touch switch
	RIGHT	Automatic using one IR switch and one touch switch
Efficiency	Better than 25% at all locations	
Background Subtraction	ON or OFF, software settable	
HV supply	0 to 1000 V internally preset	
Counting Time	Settable between 1 and 999 seconds	
Alarms	Green / Red bright LEDs with audio buzzer	
Alarm Setting	Level - 1 to 999 CPS, software settable	
Mechanical Enclosure	Powder coated Wall Mountable Steel housing Dimensions: 220 W x 360 H x 260 D mm	
Power	230V / 50 Hz AC Mains	

Due to continuous R&D, specifications are likely to change without notice

For further details contact :

Electronic Enterprises (I) Pvt. Ltd.
Para Electronics Manufacturing Division



306, Nimesh Industrial Estate
Vidyalaya Marg, Mulund(East)
Mumbai 400 081
Phone : 022-25635600 / 25632741
Fax : 022-25637835
Website : www.eeipl.in
Email: pemd@eeipl.in

Mumbai
022-25639904
eemulund@eeipl.in
Kolkata
033-25770551
eecal@eeipl.in

SALES OFFICES
Hyderabad
040-23243352
eehyd@eeipl.in
Delhi
011-27240436
eedelhi@eeipl.in

Bangalore
080-23380451
eebng@eeipl.in
Kota
0744-2501113
eekota@eeipl.in