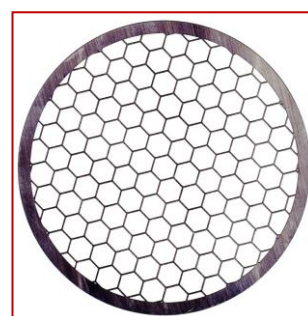


## **ALSCIN WALL MONITOR**

### **SALIENT FEATURES**

- SPECIAL THIN HONEY-COMB PATTERN S.S. MESH FOR BETTER EFFICIENCY AND LARGE OPEN AREA
- MICRO CONTROLLER BASED
- HIGHLY FACILITATED
- HAND HELD, LIGHT WEIGHT & PORTABLE
- DIGITAL LCD READOUT
- AUTOMATIC CONVERSION TO bq/cm<sup>2</sup>, CPS, CPM
- EASY REPLACEMENT OF ALUMINISED MYLAR
- VERY LOW BACKGROUND
- WELL PROVEN LONG LIFE PM TUBE
- DATA STORAGE & DUMP VIA RS232 PORT
- RECHARGEABLE BATTERIES



### **INTRODUCTION**

Alscin Monitor type ALS 939 is hand held, micro controller based, rechargeable battery operated, and portable instrument. It is a very useful & convenient instrument for measuring contamination of alpha particles on the surface of walls, floors, tables etc. with 8 x 2 LCD display, low-level alpha contamination can be measured in terms of counts/CPM/CPS/bq/sqcm

Scintillation detector uses ZnS evenly coated layer on Mylar sheet, which is covered by aluminised Mylar to prevent external light & thereby get better efficiency. Also, mylar replacement is now made very easy in these instruments & mylar strength is also improved. S.S. mesh used for mylar protection is specially made, honey-comb shaped to achieve better efficiency & open-to-close ratio.

PM tube used, is a well proven long life PM tube for more than 20 years. It is rugged & has low dark current. Also, it is well specified for shock & vibrations, which is extremely important when used in portable instruments.

### **TECHNICAL SPECIFICATIONS**

#### **DETECTOR**

<b>Radiation Detected Detector</b>	: $\alpha$ ( Alpha ) : Built-in ZnS Scintillator covered with aluminised mylar with 2" PM Tube (10 dynodes, Gain:0.6x10 <sup>6</sup> , Dark Curr:0.3nA typical) (Shock:30g/11ms/3 shocks per axis, Sinusoidal Vibration: 10-32Hz:10mm, 32-2000Hz:20g, 2 octaves/min)
<b>Scintillation Window</b>	: Circular window of 11 cm diameter, With opening area >80%
<b>Efficiency</b>	: Better than 25%
<b>Background</b>	: < 15 Counts/hr.

## **TECHNICAL SPECIFICATIONS (cont'd)**

### **SCALER**

- Units** : Counts CPM, CPS, bq/sqcm conversion by pressing UP button after the end of preset time
- Range** : 0 – 999999 Counts and 0.01 to 99.9 bq/sqcm
- Audio Chirp** : A chirp sound per detected pulse chirp mute if required )
- Efficiency** : To be entered manually (For bq/Sqcm calculation)

### **TIMER**

- Auto Mode** : Starts with START switch & auto stops after preset time
- Manual Mode** : START / STOP by button
- Reset Button** : To reset Scaler & Timer
- Elapsed time** : AUTO mode 1 to 9999s or 1 to 9999M (minutes)

### **CONTROLS & INDICATIONS**

- Power ON Switch** : Rocker Switch
- Display Lamp Modes** : ON or OFF or Auto (10 sec)
- Other Push Buttons** : START/STOP, RESET, SHIFT, UP & ENTER
- Display** : 8 x 2 Alpha Numeric Dot Matrix LCD with back light
- Count ON** : LED indication when counting is in progress
- Low Batt.** : 'LOW BATT' on LCD
- Over Range** : 'OFL' (overflow) on LCD, when count exceeds 999999

### **OTHERS**

- Mylar Protection mesh** : Specially designed thin honey-comb pattern S.S. mesh for better efficiency & better open-to-close ratio.
- Mylar Mounting** : on S.S. frame for easy replacement
- Mylar Replacement** : Screw less ( No screws to be removed for replacement of mylar)
- Decontamination facility** : Individual openings for SS grill and mylar-scintillator. SS grill can be replaced without disturbing mylar-scintillator.
- Data Storage** : Automatic storage of readings at the end of elapsed time. Max. readings storage capacity: 1000. Provision to delete stored readings. Data dump to PC through RS232 port.
- Facilities** : Data Dump, Erase and Recall
- HV** : 500V - 1000V DC ( factory set to suit detector )
- Power** : 230 VAC mains or rechargeable batteries.  
Batteries can be charged without removing from instrument
- Accessories** : Battery charger

CAT.NO. ALS939 /0916

## **PLA ELECTRO APPLIANCES PVT. LTD.**

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