

ALSCIN MONITOR WITH DRAWER ASSEMBLY

ALS939D

SALIENT FEATURES

- MICRO CONTROLLER BASED
- WITH DRAWER ASSEMBLY
- HAND HELD, LIGHT WEIGHT & PORTABLE
- DIGITAL LCD READOUT
- VERY LOW BACKGROUND
- WELL PROVEN LONG LIFE PM TUBE
- DATA STORAGE
- RS232 PORT
- RECHARGEABLE BATTERIES WITH BATTERY CHARGER
- AUTOMATIC CONVERSION TO Bq/cm^2 , CPS, CPM



INTRODUCTION

Alscin Monitor type ALS 939D is portable, rechargeable battery operated, Microcontroller based instrument with drawer arrangement to hold filter paper. It is a very useful & convenient instrument for measuring contamination of alpha particles on collected samples on filter paper with 8 x 2 Alpha Numeric dot matrix LCD display with back light & preset timer, low-level alpha contamination can be measured. & Data storage facility for counts with time & serial number is also available.

Scintillation detector uses ZnS evenly coated layer on Mylar sheet, which is covered by aluminised Mylar to prevent external light & thereby get better efficiency.

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

- Radiation Detected** : α (Alpha)
- Detector** : Built-in ZnS Scintillator covered with aluminised mylar with 2" PM Tube (10 dynodes, Gain: 0.6×10^6 , Dark Curr: 0.3nA typical) (Shock: 30g/11ms/3 shocks per axis, Sinusoidal Vibration: 10-32Hz: 10mm, 32-2000Hz: 20g, 2 octaves/min)

- Scintillation Window** : Circular window of 5 cm diameter, With opening area >80% & Drawer arrangement for filter paper
- Efficiency** : Better than 25%
- Background** : < 7 Counts/hr

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** : Settable by keypad (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 power saving 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
- Over Range** : 'OFL' (overflow) on LCD, when count exceeds 999999

OTHERS

- 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)
- DRAWER** : Drawer arrangement for 1"φ & 2"φ sample paper counting
- MYLAR MOUNTING** : On S.S. frame
- POWER** : 230 vac mains or rechargeable batteries.
Batteries can be charged without removing from instrument
- Accessories** : Battery charger
- Carrying case optional** : with shoulder strap, Suitable for the protection of Alscin Monitor Which has fragile parts (PM Tube, Mylar etc)
- Note** : Optional item at an extra cost

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