

ALPHA CONTAMINATION MONITOR

- SINGLE KEY PRESS TO CHANGE COUNT RATE MODE INTO PRESET TIME
- EASY OPERATION • SPECIALLY DESIGNED FOR LOW COUNT RATES • CPS • CPM
- COUNTS • bq/cm² • DATA STORAGE • SERIAL PORT • BACKLIT LCD • COUNT RATE ALARM • RECHARGEABLE BATTERY



(ALS-938 with PSP649/100)



(ALS-938 with PSP649/25)

INTRODUCTION

This Instrument is especially designed for low count rates of Alpha contamination. While frisking, count rate (CPS) mode is to be used and if audio chirp is heard, preset time mode can be selected by single key press. At the end of preset time, result in bq/cm² toggles with counts reading. Then by a Single key press of CPS mode again.

TECHNICAL SPECIFICATIONS

DETECTOR

RADIATION DETECTED	: α (Alpha)
DETECTOR	: Built-in ZnS Scintillator covered with aluminized mylar
SCINTILLATION WINDOW	: PSP649/100 : 11cm dia OR PSP649/25 : 5cm dia
PM TUBE	: 2" PM tube (10 dynodes, Gain : 06. x10 ⁶ Dark Curr:0.3nA typical) (Shock:30g/11ms/3 shocks per axis, Sinusoidal Vibration:10-32Hz:10mm, 32-2000Hz:20g, 2 octaves/min)
EFFICIENCY	: Better than 25%
BACKGROUND	: < 15 Counts/hr.

COUNT RATE MODE

Units	: CPS (1 cps resolution), CPS (0.1 cps resolution) CPM (1 cpm resolution)
Audio Chirp	: per detected pulse
Range	: 0 to 9999 CPS/CPM
Alarm	: Audiovisual alarm settable in steps of 0.1 cps

PRESET TIME MODE

Time : 0 to 99999 seconds (SETTABLE)
Range : 0 to 999999 counts
Result in bq/cm² : Automatic toggling with accumulated counts at the end of preset time (from 0.01 bq/cm² to 99.9 bq/cm²)

Mode change over : By single key press (Press 'START' button to enter in preset time mode & press 'BACK' button to go back to count rate mode). While frisking, count rate mode is to be used and if audio chirp is heard, preset time mode can be selected by single key press.

CONTROLS & INDICATIONS

Power ON Switch : Rocker Switch
Light ON Push Button : To light-up backlit LCD for 10s (to conserve power)
Display : 16 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, with early warning
Over Range : 'OFL' (overflow) on LCD, when count exceeds 999999

OTHERS

Data Storage : 1000 records
HV : 500V - 1000V DC (factory set to suit detector)
Mylar Mounting : on S.S. frame for easy replacement
POWER : Rechargeable batteries with battery charger & 230V AC.
Note: Battery charger can be used for mains operation also.

CAT.NO. ALS938/0816

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