



## PRM-470B

Low cost hand held gamma detector



### Description

#### Model PRM-470B

TSA's hand held PRM-470B is a popular choice for locating radioactive sources and measuring intensity in the field. It uses low power CMOS electronics to provide over 60 hours of operation from the NiCad batteries. The versatile, easy to operate PRM-470B also features a self test during power up, automatic background count and user determined alarm settings.

The PRM-470B has a motion switch to automatically switch from background to search mode when the instrument is moved. After the instrument has been at rest for 15 seconds, it will revert to background update. Internal switches are provided to scale the display to  $\mu\text{sv/hr}$  or  $\mu\text{R/hr}$ . *This conversion is not energy compensated. Therefore, the value displayed is only an approximation of actual dose rate.*

### Specifications

#### Model PRM-470B SPECIFICATIONS

- SENSITIVITY: Will detect  $10\text{g }^{235}\text{U}$  (HEU) or  $1\text{g }^{239}\text{Pu}$  when tested in accordance with ASTM Standard C 1237\*.
- DETECTORS: One,  $3.5''\text{h} \times 2.88''\text{w} \times 1.25''\text{d}$  ( $9 \times 7 \times 3\text{cm}$ ) plastic scintillator detector; provides  $12.6 \text{ in}^3$  (206cc) of detector volume per instrument.
- ALARM LEVEL: Set by internal switches from 0.1 to 9.9 sigma
- ALARM INDICATION: Audible tone and LED
- COUNT TIME: Search mode: 0.05 sec. count with 0.4 sec. moving average. Background time: 10 sec.
- DISPLAY: LCD, one line x 4 characters, with backlight
- POWER REQUIREMENTS: The internal NiCad battery pack provides more than 60 hours of continuous operation on a full charge. The instrument is shipped with a universal input battery charger which operates on 90 - 250 Vac, 47 - 63 Hz. Recharge time is less than 16 hours.
- DIMENSIONS:  $8''\text{h} \times 5''\text{w} \times 3''\text{d}$  ( $20 \times 13 \times 8\text{cm}$ )
- WEIGHT: 2.4 lb (1.1kg) with batteries
- ENVIRONMENTAL:  $32^\circ$  to  $100^\circ\text{F}$  ( $0^\circ$  to  $38^\circ\text{C}$ )

\*ASTM Standard C 1237-93 is available from TSA Systems, Ltd. or The American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428. (610) 832-9585.

### Applications

#### Model PRM-470B

PRM-470B applications include Special Nuclear Material (SNM) searches at plant exits and material access areas, as well as contamination and background monitoring. The small size, light weight, and long battery life make it ideal for searching vehicles that require extended search times.