SURFACE CONTAMINATION MONITOR

Model # TBM-3SR

FEATURES:

- SENSITIVE TO ALPHA, BETA & GAMMA
- ONE HAND OPERATION
- BUILT-IN SPEAKER
- ANTI SATURATION CIRCUIT
- LARGE 2" PANCAKE DETECTOR
- BETA SHIELD/WINDOW PROTECTION

DESCRIPTION: Small three range Ratemeter with built -in 2" diameter pancake tube and speaker. Reads out in counts per minute (and mR/h). Thin window recessed and protected by sturdy grill. TBM-3SR has sliding methacrylate beta shield which also acts as additional protection for thin GM tube window. Instrument will see alpha, beta, and gamma radiation. Anti saturation circuit will not fall below full scale high fields. Tested to 100 R/h.

APPLICATION: Its small size, light weight, one hand operation, and large detector area make this a very useful monitor for surveying bench tops or checking hands, clothes, and fingertips for almost any radioactive contamination. Excellent for Fire Department, Ambulance, Police, First Response, and U.S. Custom Personnel use for surveying people, cars, luggage, surface of rooms, etc...





Figure 1: TBM-3SR

Experts Recommend the TBM-3SR for Fire Department use on every fire engine.

TA TECHNICAL ASSOCIATES 7051 ETON AVENUE * CANOGA PARK, CA 91303 TELEPHONE (818) 883-7043 * FAX(818) 883-6103

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SPECIFICATIONS:

Meter: TBM-3SR: 2-1/2" Ruggedized.

Ranges: 3 ranges, linear: 0-500; 0-5,000; 0-50,000 cpm (0-;15; 1.5; 15 mR/h).*

Switch Positions: Off, Battery Test, X100, X10, X1.

Audio: Sonalert with Volume Control.

Detector: T-1190 "pancake GM tube".

Diameter: 2"; 5cm.

Window Diameter: 1-3/4"; 4.5 cm.

Window Thickness: 1.5 mg/cm².

Quench Gas: Halogen for long life.

Background: Typical 50 cpm. Thin Profile of tube (13mm) gives low background.

Efficiency: 100% for all Betas and Alphas that have the energy to penetrate the thin window.

Gamma sensitivity nominal is 150 cpm/ μ R/h (based on Cs 137).

Physical dimensions: 3" Wide x 5-1/4" Long x 2-1/4" High. Excluding meter and handle.

(7.6 cm x 13.3 cm x 6 cm)

Beta Shield: Methacrylate 0.125", 3.1 mm.

Calibration: Single master calibration pot as well as individual cal pots for each range.

Power: 9 volt "transistor" battery; Eveready 1222, or equivalent.

Battery Life: 100 hours in normal operation.

Handle: Swivel type, polished anodized aluminum.

(Optional Detachable Handle TBM-3SR(DL) Upon Request.)

Weight: 22 oz; 625 gm

See "Beta Pancake Response" specification (BETA PANCAKE RESPONSE)

Fire Fighters: TBM-3SR is available with the Background x 10 meter, replacing the mR/hour or a single Counts Per Minute Scale or mR/hr Scale. (Upon Request)

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^{*} Option c/s, $\mu S \nu / hr$ meter scale (SI Units).