

# SURFACE CONTAMINATION MONITOR

Model Series ~ TBM-3

Model TBM-3 ~ Model TBM-3S ~ Model TBM-3SR

## FEATURES:

- SENSITIVE TO ALPHA, BETA & GAMMA
- ONE HAND OPERATION
- BUILT-IN SPEAKER
- ANTI SATURATION CIRCUITS
- LARGE 2" PANCAKE DETECTOR
- BETA SHIELD WINDOW PROTECTION (TBM-3SR Only)



CE

## APPLICATION:

Its small size, light weight, one hand operation, & large detector area make this a very useful monitor for surveying bench tops or checking hands, clothes, & fingertips for almost any radioactive contamination.

Excellent for Fire Department, Ambulance, Police, First Response, & U.S. Custom Personnel use for surveying people, cars, luggage, surface of rooms, etc...

**EXPERTS RECOMMEND TBM-3SR FOR FIRE DEPARTMENT USE ON EVERY FIRE ENGINE.**

## DESCRIPTION:

The TBM-3 Series are small three range Ratemeters with built -in 2" diameter pancake tube and speaker.

- Reads out in counts per minute (and mR/h).
- **TBM-3** has no window
- **TBM-3S** Thin window recessed and protected by sturdy grill.
- **TBM-3SR** has sliding methacrylate beta shield in addition to the sturdy grill to protect the thin GM tube window.
- Sees Alpha, Beta, and Gamma radiation.
- Anti-saturation circuit will not fall below full scale high fields.
- Tested to 100 R/h.



TECHNICAL ASSOCIATES

Divisions of



US NUCLEAR CORP

OVERHOFF TECHNOLOGY

7051 Eton Ave., Canoga Park, CA 91303  
818-883-7043 (Phone) 818-883-6103 (Fax)

[tagold@nwc.net](mailto:tagold@nwc.net)

[WWW.TECH-ASSOCIATES.COM](http://WWW.TECH-ASSOCIATES.COM)

# SURFACE CONTAMINATION MONITOR

## Model Series ~ TBM-3

### Model TBM-3 ~ Model TBM-3S ~ Model TBM-3SR

#### SPECIFICATIONS:

##### Meter:

**TBM-3:** 2-1/2" Rectangle.

**TBM-3S & 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:

**TBM-3:** Internally Mounted Speaker.

**TBM-3S & TBM-3SR:** 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/cm<sup>2</sup>.

**Quench Gas:** Halogen for long life.

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

**Efficiency:** 100% for all **Betas & Alphas** that have the energy to penetrate the thin window. **Gamma** sensitivity nominal is 3 cpm/ $\mu$  R/h (based on Cs 137).

#### WEIGHT & DIMENSIONS:

**Dimensions:** 3" Wide x 5-1/4" Long x 2-1/4" High. (7.6 cm x 13.3 cm x 6 cm)  
Excluding meter and handle.

**Beta Shield:** **TBM-3SR Model Only:** 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

#### OPTIONS:

**Optional Read Out Units:** c/s,  $\mu$  Sv/hr meter scale (SI Units).

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)



**TECHNICAL ASSOCIATES**

Divisions of



US NUCLEAR CORP

**OVERHOFF TECHNOLOGY**

7051 Eton Ave., Canoga Park, CA 91303  
818-883-7043 (Phone) 818-883-6103 (Fax)

[tagold@nwc.net](mailto:tagold@nwc.net)

[WWW.TECH-ASSOCIATES.COM](http://WWW.TECH-ASSOCIATES.COM)