

SAMPLE COUNTING SYSTEM

Model # STG-BS44

APPLICATION: Model **STG-BS44** is especially well suited for counting Beta emissions from air sampler filters.

The **STG-BS44** Beta Scintillation System combines a Beta Scintillation Detector plus TM-4 drawer system for sample containment. In this detection system, the protective window and grill are deleted to enhance sensitivity to Beta radiation.

Stainless steel drawer and base plate for stability and easy cleaning.

The sensitivity of the **STG-BS44** to $\text{Sr}^{90}\text{Y}^{90}$ Beta is typically 80-85% of 2π . It is completely insensitive to alphas when used with the **Optional** Beta filter. Sample cavity is 4 1/16" diameter x 3/16" deep. Allows 4" sample diameter x 3/16" thick sample size.

Windowless operation, with light-tight housing and automatic HV cutoff when drawer is opened.



Figure 1: STG-BS44

SPECIFICATIONS:

Photomultiplier Tube:	Available with 2", 3", or 5" diameter PM tube. 10-stage.
Scintillator:	Plastic Beta Scintillator, 0.02" thick.
Plateau:	200 Volt long.
Efficiency:	Cs^{137} 75% of 2π . $\text{Sr}^{90}\text{Y}^{90}$ 100% of 2π . C^{14} is 24% of 2π . Tc^{99} is 35% of 2π .
Dimensions:	7" W x 14" D x 16" H.
Weight:	16 lbs.
Shipping Weight:	28 lbs.

Beta Scintillation detector 4" diameter. The 90cm^2 face of this probe allows shorter count times plus high sensitivity.

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