

TSA BM185

Small Item Radiation Waste Monitor



The TSA BM185 is designed to scan small items (less than 1 ft.³) for radioactive emissions and is ideal for monitoring prior to release from the facility. With an efficient and accurate go/no go analysis and typical scan times of one to three minutes, the TSA BM185 waste monitor allows for efficient and cost effective waste management.

Advanced Design Features

The TSA BM185 provides 4pi geometry and efficiency of greater than 45% for ⁶⁰Co for effective and accurate screening of all sides of the item. The monitor's high sensitivity and uniform measurement is achieved by using large surface area plastic scintillator detectors on all six sides of the counting chamber. With lead shielding on all sides, the BM185 provides higher sensitivity and isolates the scanned item from any external radiation influence. Designed for minimal maintenance, the TSA BM185's electronics are mounted above the chamber for easy access. The touchscreen panel PC is mounted on an arm that allows for ease of movement while protecting the touchscreen.

Programmable Detection Parameters

With the ability for an administrator to define screening parameters, customizing the BM185 for specific radioactive isotopes or 'waste streams' is possible. The operator selects the proper waste stream from an annotated list for each item to be scanned making the BM285 flexible when screening for multiple contaminants.

Easy-to-Operate

Operation is simple using the color touchscreen panel PC. Easy to read graphics provide instant reporting of system status and operating mode. Administrators can generate reports for all activity or only alarmed activity for efficient record keeping on waste disposal.

Flexible Options

The BM185 comes standard with a stainless steel liner that protects the detectors and allows for easy cleaning if contaminated. An optional aluminum liner is available if greater sensitivity is required. With the optional sodium iodide detector, spectral isotopic identification to fit specific detection requirements is possible.

Standard Features

- 4pi Detector Geometry
- Stainless Steel Liner
- Lead Shielding on all Sides
- 20 Programmable Waste Streams
- User-Friendly Operator Interface
- Color Touchscreen Panel PC
- Keyboard (US English)
- Heavy Duty Casters

Markets

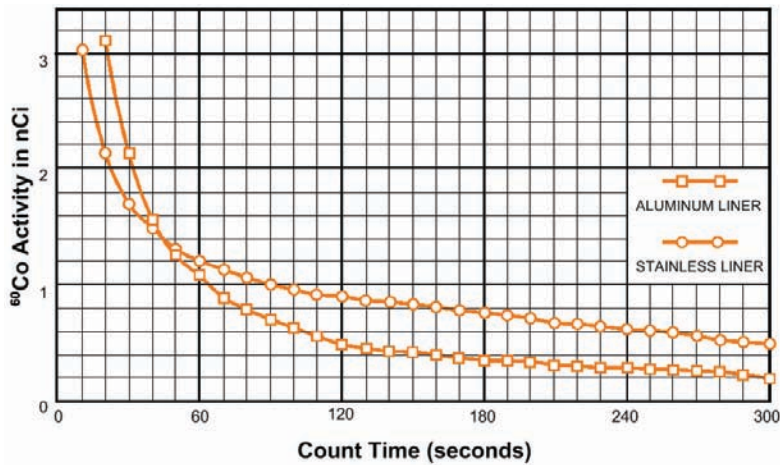
- Critical Infrastructure
- Hospitals
- Nuclear Facilities
- Defense

TSA BM185

Specifications

Sensitivity	See the Minimum Detectable Activity Chart below
Detectors	Six 12 h x 12 w x 1.5 d in. (30 x 30 x 3.75 cm) plastic scintillator detectors, provides 1,296 in ³ (21 liters) of detector volume per system. Gamma energy range is 30 keV to 2 MeV.
Display	Fifteen inch panel PC, color monitor, with touch screen
Power Requirements	115/230 Vac, 47-63 Hz, <500 VA
Dimensions	40 h x 27 x 26 d in. (1,060 x 660 x 685 mm) not including side mount PC
Chamber Dimensions	11.75 h x 11.75 w x 12 d in. (30 x 30 x 30 cm)
Volume	Approximately 1 ft ³ (28 liters)
Weight	Approximately 1,800 lbs (820kg)
Environmental	32° to 100° F (0° to 38° C)

Minimum Detectable Activity Chart



Confidence of Detection 90% (1.3 sigma)
False Alarm Rate 1/100 (2.33 sigma)
2% micro/hour background Eff. - 38%

Options

Aluminum Liner: provides minimum attenuation

Internal scale

Printer

