

Box Waste Monitor



BM-185E
Gamma 1 ft³ box monitor

Description

TSA's BM-185E is designed to scan small items for radioactive contamination. The BM-185E provides 4π geometry and efficiency of greater than 45% for ^{60}Co .

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. The output from each detector is processed individually and sent to the panel PC by the system controller.

User operation is made simple with the touch screen color monitor panel PC. Easy to read graphics provide instant reporting of system status and operating mode. Ten different languages are currently available and are selectable from the panel PC. The user can change or modify any translated word or phrase to better convey the meaning.

The aluminum liner provides minimum attenuation. The BM-185E's electronics are mounted above the chamber which allows access for repair. The panel PC is mounted on an arm that allows for convenient access and retraction for protected relocation.

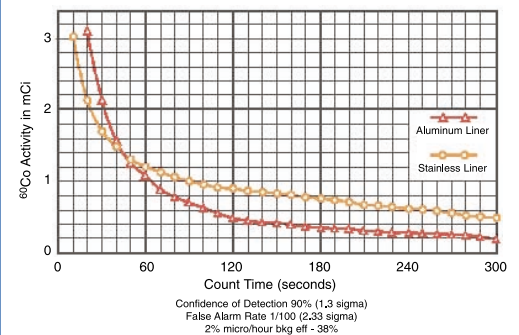
Beyond standard equipment, the BM-185E offers users flexibility. For example, the system can be equipped with an internal scale to permit specific activity measurements.

Specifications

Model BM-185E SPECIFICATIONS

- **SENSITIVITY:** See the BM-185E Minimum Detectable Activity Chart
- **DETECTORS:** Six, 12" h x 12" w x 1.5" d (30 x 30 x 4cm) plastic scintillator detectors; provides 1,296 in³ (21 liters) of detector volume per system. Gamma energy range is 30 keV - 2 MeV. Detectors are fully shielded by a minimum of 1" (2.5cm) of lead.
- **DISPLAY:** Panel PC, color monitor with touch screen
- **POWER REQUIREMENTS:** 115/230 Vac, 47 - 63 Hz, less than 500 VA
- **DIMENSIONS:**
 - Overall Dimensions: 42" h x 26" w x 26.5" d (107 x 66 x 67cm)
 - Chamber Dimensions: 11.75" h x 11.75" w x 12" d (30 x 30 x 30cm)
 - Volume: \approx 1 ft³ (28 liters)
- **WEIGHT:** \approx 1,800 lb (820kg)
- **ENVIRONMENTAL:** 32° to 100°F (0° to 38°C)
- **OPTIONAL COMPONENTS:** Internal scale, stainless steel liner

BM-185E Minimum Detectable Activity



Applications

The BM-185E is designed to scan small items (less than 1 ft.³) for radioactive contamination.

The BM-185E is ideal for monitoring small items prior to release and provides accurate go/no-go analysis with typical scan times of one to three minutes.