

Bag/Barrel Waste Monitors

Description

TSA's BM-285D bag monitor and BM-286D barrel monitor are trouble free instruments designed to measure gamma contamination of containerized material. The BM-285D can accommodate containers up to 500 lb., while the BM-286D is designed to hold 55 gallon drums weighing up to 1,000 lb.

An aluminum or stainless steel liner protects the detectors from the articles being monitored. The load platform, containing the weight monitoring load cells, is mounted on sliding runners to facilitate loading heavy samples.

Plastic scintillation detectors are mounted on all six sides of the counting chamber to provide uniform measurement throughout the chamber. The monitors' high sensitivity is achieved by using these large surface area plastic detectors coupled with micro-processor controlled electronics and sophisticated software algorithms.

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. Operator menus and error messages are clearly displayed.

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.

From the keyboard, the system administrator can change all of the operation parameters. System operation and parameters are password protected with separate access levels. Report generation is automatic and continuous; reports may be printed at any time.

Up to twenty different sets of operating parameters for different waste streams may be stored on disk. The operator selects the proper waste stream from an annotated list for each item to be scanned.



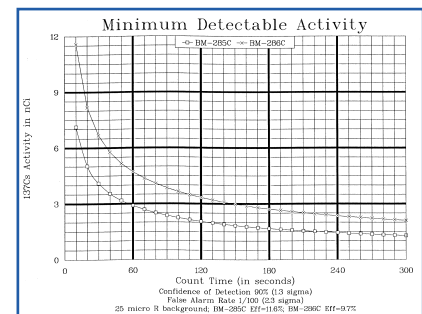
BM-285D / BM-286D

Gamma 10 ft³ bag monitor / Gamma 14 ft³ barrel monitor

Specifications

Model BM-285D and BM-286D SPECIFICATIONS

- **SENSITIVITY:** See the Minimum Detectable Activity Chart
- **DETECTORS:**
 - BM-285D: Two, 12" h x 19" w x 1.5" d (30 x 48 x 4cm), plus four, 12" h x 25" w x 1.5" d (30 x 64 x 4cm) plastic scintillator detectors; provides 2,484 in³ (41 liters) of detector volume per system. Gamma energy range of 40 keV - 1.6 MeV, can be limited with discriminators. Detectors are fully shielded by a minimum of 1.75" (4cm) of lead.
 - BM-286D: Two, 12" h x 24" w x 1.5" d (30 x 61 x 4cm), plus four, 12" h x 36" w x 1.5" d (30 x 91 x 4cm) plastic scintillator detectors; provides 3,456 in³ (57 liters) of detector volume per system. Gamma energy range of 40 keV - 1.6 MeV, can be limited with discriminators. Detectors are fully shielded by a minimum of 1.75" (4cm) of lead.
- **DISPLAY:** Super VGA color flat panel monitor with touch screen
- **POWER REQUIREMENTS:** 115/230 Vac, 47 - 63 Hz, 400 VA
- **DIMENSIONS:**
 - Overall Dimensions:
 - BM-285D: 57" h x 44" w x 40" d (145 x 112 x 102cm)
 - BM-286D: 69" h x 44" w x 44" d (175 x 112 x 112cm)
 - Chamber Dimensions:
 - BM-285D: 29" h x 24" w x 27" d (74 x 61 x 69cm); Volume: ≈10 ft³ (300 liters)
 - BM-286D: 45" h x 28" w x 28" d (114 x 71 x 71cm); Volume: ≈14 ft³ (570 liters)
- **WEIGHT:**
 - BM-285D: ≈10,000 lb (4,400kg)
 - BM-286D: ≈12,000 lb (5,448kg)
- **ENVIRONMENTAL:** 32° to 100°F (0° to 38°C)
- **ACCESSORIES:** (included with system) VGA color monitor, 101 key keyboard
- **OPTIONAL COMPONENTS:** Printer, NaI(Tl) detector and 1,024 channel MCA for spectral isotopic identification



Applications

The BM-285D bag monitor and the BM-286D barrel monitor measure gamma contamination of containerized material.

The capacity of these units allow for monitoring large amounts of material in a minimum number of operations. The BM-285D can accommodate containers up to 500 lb., while the BM-286D is designed to hold 55 gallon drums weighing up to 1,000 lb.

Isotopic identification is possible with an optional sodium iodide detector, multi-channel analyzer and applicable software.