

Model HWM-400S

Automated Free Release Monitor for Gamma Emitting Radionuclides

The Model HWM-400S is a partly automated compact clearance monitor designed with very high throughput for gamma emitting radionuclide objects up to 150 kg (330 lb) and 400 L (14.1 ft³) in volume.

The standard unit is equipped with the following features:

- 6 gamma plastic detectors for complete 4 π coverage
- 30 mm (1.2 in.) lead shielding
- Built-in weigh scale for items up to 150 kg (330 lb)
- Powder-coated steel frame with easy to clean stainless steel lining inside and outside
- Manual conveyor system with electrically driven door
- Stand-alone control cabinet with 17 in. touch-screen display, keyboard with mouse-trackball, UPS for the protection of measurements and controllers
- Automated measuring process with user guidance
- Radionuclide composition suggestion from detector pulse analysis
- Network capability for remote monitoring and supervision



The Model HWM-400S provides fast and reliable detection of gamma emitting radionuclides. Equipped with the latest measuring electronics and a built-in maintenance module, it allows optimization of the system to ensure consistent peak performance.

Key Features

- Reduced Dead Zones: > 70% Coverage (Inner Chamber to Detector Size)
- Intuitive Operating Software That Is Easy to Use
- High Throughput in a Small Footprint
- Export of Measurement/Parameter Data in XML Format via USB
- Energy Filter Settings to Optimize Discrimination of Background Radiation
- Integrated UPS for Finalizing Measurements and Protecting Electronics and Controllers During a Power Outage
- Stand-Alone Control Cabinet with Ergonomically Positioned Touch Operated Display
- Access to Historical Measurement Data via Integrated Database
- Access to Ludlum Test Tool Software for Detector Analysis

Standards:	The monitor is compliant with the following standards: CE, CSA / UL or EMC, ISO11929
Detectors:	6x gamma plastic detectors Detector volume: > 125 L (4.41 ft ³) Direct connection of each detector to the PC via USB
User Software:	Intuitive operator software with touch-screen display, automated measurement process with user guidance, indications of results and measurement material position on the display. Web based for RPO remote access.
Electronics:	Integrated illumination in the chamber, status-LED, interlock-relays with interface to external units
Housing:	Coated steel frame with stainless steel covers Front door with special hinges and manual lock Manual conveyor system
Sensors:	2 door sensors with interlock, integrated weigh scale, safety sensors to avoid access to the moving door area
Ext. Dimensions:	1,979 x 1,095 x 1,118 mm (77.9 x 43.1 x 44 in.) (H x W x D), without conveyor
Chamber Volume:	900 x 700 x 750 mm (35.4 x 27.6 x 29.5 in.) (H x W x D), 473 L (16.7 ft ³)
Shielding:	Standard: 30 mm (1.2 in.) lead Option: 50 mm (2 in.) lead
Weight:	Standard: approx. 2,550 kg (5,620 lb) With 50 mm lead: 3,350 kg (7,385 lb)
Power Supply:	230 V / 16 A / N / PE UPS for controllers and integrated PC (not for door motors)



Software Screenshots

Additional Options

Ludlum offers a range of additional options to enhance the capabilities of the monitor and to customize the instrument to your specific needs.

- Second door and conveyor on the exit-side
- Additional lead shielding (50 mm [2 in.] instead of 30 mm [1.2 in.])
- Integration of a camera in the chamber



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