HRM & HRM Blue
Handheld Radiation Monitor

The HRM is a small, self contained gamma ray and thermal neutron radiation detector for use in the interdiction and location of nuclear materials. It was specifically designed to be easily used by trained security forces and emergency responders. The high sensitivity of the instrument is made possible by the use of a miniature photomultiplier tube and solid state scintillation detector combined with a high pressure Helium-3 filled proportional counter. The HRM is the size of a flashlight, and is intended to be handheld or worn on the operator’s belt in the nylon holster provided. When gamma rays or neutrons are detected at levels significantly above the natural background, the unit quickly alerts the operator by either sounding an audio alarm or vibrating, and lighting the single digit LED displays. The operator can easily locate the radiation source using the duty-cycle based audio alarm or vibration, and the single digit LED displays. The HRM is designed for operators who need to quickly and discreetly detect and locate a radiation threat in an unpredictable radiation background. The rugged HRM is easy to use. Operators can be trained in proficient use of the instrument in less than one hour.

HRM

- Gamma Detector: Cesium Iodide scintillator
  0.5 inch dia. (1.3 cm) x 1.5 inches long (3.8 cm)
- HRM Size: 8.3 inches (21.1 cm) x 2.0 inches (5.1 cm) x 1.2 inches (3.0 cm)
- Weight: 13 oz. (369g) with battery
- Waterproof to 66 ft.
- Operating Temperature Range: -13 to 122 degrees F (-25 to 50 degrees C)
- Alarm type: Single digit, 7 segment red LED displays (one each for neutron and gamma ray) duty cycle based audio tone, duty cycle based vibrator, Real time blue LED for neutrons detected
- Neutron Detector: Helium-3
  8.3 atmospheres absolute (122 psia) 0.75 inch dia. (1.9 cm) x 4.8 inches long (12.2 cm), 1.81 in³ vol.
- Gamma-ray Low Energy Cutoff: ~45 KeV
- Battery: 3 volt lithium size 2/3A, 1 month continuous operation
- Storage Temperature Range: -13 to 122 degrees F (-25 to 50 degrees C)
- Integration Time (Response time): <1 second
- Search capability: Duty cycle based audio tone or duty-cycle based vibrator, and two single digit red LED displays.

HRM Blue

- All standard HRM features plus Bluetooth connectivity
- Internal Bluetooth Low Energy (BLE) per SIG v4.2
- Operator control of Bluetooth pairing—default value of Bluetooth is OFF
- Compatible with Government GIS tracking software