



**D-tect**  
SYSTEMS

A DIVISION OF LUDLUM MEASUREMENTS, INC.

# Rad-D

## FEATURES

- Omni- or uni-directional
- Small, mounts anywhere
- Reacts in less than 1 second
- Easy to use, no special training required

## Finds Radioactive Materials in People, Vehicles or Packages.

The Rad-D is a fixed-position radiation detector that is used to monitor doorways, driveways, and loading docks. It can inspect packages or luggage on conveyor belts and can be integrated with an X-ray machine or metal detector to increase detection capabilities.

The Rad-D is small. While similar devices need large, fixed areas and concrete footings to mount their systems and require traffic (vehicles or people) to be forced through a fixed inspection corridor, the Rad-D can be attached to walls, light poles, conveyor belts, or X-ray machines. The flow of vehicles or pedestrians runs smoothly under inspection.

A Rad-D system can include up to four detectors – operating simultaneously – each up to 150 feet away from the display electronics. The Rad-D integrates into existing security networks using either a serial communications link or a Bluetooth wireless link that can communicate with a PC up to 300 feet away. With four detectors, an operator can monitor four different doorways, driveways, conveyor belts, etc., anywhere in your facility. When the Rad-D alarms, it can trigger active responses such as halting conveyor belts or lowering a blockade.



Two different types of Rad-D detectors are available: gamma and neutron. The gamma radiation detector searches for both gamma and X-ray radiation and can be configured as either omni-directional or uni-directional. This ensures that the unit is triggered only by what is directly in front of it, not by what is in the next traffic lane or on a parallel conveyor belt.

The neutron detector is an important tool to detect the transport of illicit nuclear weapons. Many users configure a combination of gamma radiation detectors and neutron detectors to cover the full spectrum of radiation.

Like the MiniRad-D, the Rad-D is extremely user-friendly. It provides the operator with a single digit read on a scale of “1” to a “9” to show the strength of the detected radiation. The Rad-D also shows the actual count of photons or neutrons and automatically calibrates itself to the natural background radiation environment to maximize its detection sensitivity.



## Rugged, Sensitive & Easy to Use

### RAD-D SPECIFICATIONS

<b>Mission</b>	Fixed radiation detector for doorways, driveways, conveyor belts, or X-ray machines
<b>Detector</b>	1. 2" x 3" (5.1 cm x 7.6 cm) Sodium Iodide scintillation detector with photo-multiplier tube 2. He3 neutron detector
<b>Display</b>	Large, bright LED displays
<b>Datalinks</b>	Serial and Bluetooth (100 meter range)
<b>Power</b>	110V AC or 220V AC
<b>Energy Range</b>	40 keV to 3 MeV
<b>Response Time</b>	Less than 1 second
<b>Calibration</b>	Automatic (Background)
<b>Notification</b>	.03 mR/hr above background radiation (audio/LED)
<b>Dimensions</b>	Display Box: 6.75" x 4.2" x 3" (17.1 cm x 10.7 cm x ) Detectors: 5" diam x 17.5" (12.7 cm diam x 44.4 cm)
<b>Weight</b>	Display Box: 1.5 lbs (0.68 kg) Detector (with lead shielding): 27.5 lbs (12.5 kg) Detector (without shielding): 8.5 lbs (3.9 kg)
<b>Environment</b>	Controlled environment or weather sealed, operates in high RF environments
<b>Warranty</b>	2 years parts and labor
<b>Versions</b>	1. Normal gamma and/or neutron 2. Lead-shielded (for use with X-ray machines)

# Rad-D